

2021

DEFENSE OF JAPAN



内閣府
防衛省
2021



2021

DEFENSE OF JAPAN



防衛省・自衛隊
MINISTRY OF DEFENSE

On the Publication of Defense of Japan 2021



岸信夫

Minister of Defense
KISHI Nobuo

In the year 2020, not only did the entire world face unprecedented difficulties due to COVID-19, but various security challenges and destabilizing factors became more tangible and acute, and the international order based on universal values, which has underpinned the peace and prosperity of the international community, has been greatly tested.

Looking at the situation around Japan, China has continued its unilateral attempts to change the status quo in the East and South China Seas. China Coast Guard (CCG) vessels are sighted almost daily in the contiguous zone surrounding the Senkaku Islands, an inherent part of the territory of Japan, and repeatedly intrude into Japan's territorial waters. Furthermore, there have also been incidents of CCG vessels approaching Japanese fishing boats while intruding into Japanese territorial waters, further making the situation serious. Against this backdrop, China entered into force the China Coast Guard Law in February 2021. The CCG Law includes problematic provisions in terms of their inconsistency with international law. Sources of inconsistency include, among others, ambiguity as to geographical areas the CCG Law applies and how the rules governing the use of weapons are implemented. The CCG Law must not be allowed to infringe on the legitimate interests of the relevant countries including Japan. Furthermore, the raising of tensions in the East China Sea and other sea areas is completely unacceptable.

In addition, North Korea is proceeding with ballistic missile development at an extremely rapid pace. It launched ballistic missiles of a new type in 2021, and such military trends, including nuclear and missile development, pose grave and imminent threats to Japan's security.

The Indo-Pacific region is the core of the world's vitality, and at the same time, it faces various security challenges. In the midst of the changing global power balance, the importance of the region

is further increasing. In order to counter these challenges in the security environment, it is essential not only to strengthen Japan's own defense capabilities and expand the roles we can fulfill, but also to closely cooperate with countries that share the same fundamental values.

In particular, cooperation with the United States, our only ally, is of paramount importance. Since the new U.S. administration took office, I have continued to pursue close bilateral cooperation through a defense ministerial meeting, the Japan-U.S. "2+2" meeting, and other opportunities. I also believe that the fact that the Japan-U.S. Summit Meeting was held as the first face-to-face meeting with foreign leader since the President Biden's inauguration testifies that the United States also attaches great importance to the Japan-U.S. Alliance. The Alliance is the cornerstone of peace, security, and prosperity in the region, and we will strive to further strengthen its deterrence and response capabilities in order to further solidify the unshakable bond of the Japan-U.S. Alliance.

Furthermore, Japan is promoting the "Free and Open Indo-Pacific" (FOIP) vision, based on the concept that achieving a free and open rules-based order will enhance peace and prosperity across the entire region and throughout the world. The MOD/SDF will further contribute to the peace and stability of the region and the international community through active cooperation with countries that share Japan's vision of the FOIP, including not only the United States as our ally, but also Australia, India, European countries including the United Kingdom, France, and Germany, as well as Canada and New Zealand.

With every step taken along the path of a peace-loving nation, Japan has become a country that proudly flies the flag of universal values, such as freedom, democracy, the rule of law, and respect for fundamental human rights. As the flag bearer of universal values in the Indo-Pacific region, joining hands with like-minded partners, we must cherish freedom, have faith in democracy, be deeply resentful at the failure to protect human rights, and resolutely oppose to any attempt to change the order by coercion. SDF personnel perform their demanding duties every day with this determination to protect the nation of Japan, including these values that have taken root deep in the hearts and minds of our people.

This white paper firmly demonstrates to readers not only at home, but also abroad that the MOD/SDF have unwavering will and ability to defend Japan even in the midst of a drastically changing security environment, alongside showing the high level of transparency regarding the activities and efforts of the MOD/SDF.

The MOD/SDF will diligently engage in our duties on the front lines of national defense at all times, boldly fulfilling our responsibilities to safeguard lives and peaceful livelihoods of our people, and the integrity of our territory, waters, and airspace, and will do our utmost to ensure the peace, stability, and prosperity of the region and the international community.


Special Feature 1 Defense Chronology
Special Feature 2 Chronicle of Disaster Relief Operations
Special Feature 3 Challenges in the Space, Cyber and Electromagnetic Spectrum Domains
Digest

The content of Part I to Part IV of the main text is summarized in 24 pages.


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● Maps in this White Paper may contain omissions depending on the design and layout and may not necessarily show the entire Japanese territory.

The period covered by this White Paper is up to the end of March 2021, in principle.

Regarding the purpose of Defense of Japan and the target period of its descriptions

The Defense of Japan white paper was first published in 1970, and has been published annually since 1976. The purpose of publishing this paper is to make the current status, issues and initiatives of Japan's defense common knowledge for as many people as possible, as simply as possible.

This edition of Defense of Japan covers the defense and security environment of Japan and the initiatives of the Ministry of Defense (MOD) and the Self-Defense Forces (SDF) during the one year period from April 2020 to March 2021. However, certain important events that took place in the latter half of May 2021 are also described.

In addition, maps in this paper may contain omissions depending on the design and layout and may not necessarily show the entire Japanese territory. Previous editions of Defense of Japan, including this edition, can be viewed on the MOD website, so please feel free to make use of it.

■ Defense of Japan web page

https://www.mod.go.jp/en/publ/w_paper/index.html



■ Defense of Japan Archive

http://www.clearing.mod.go.jp/hakusho_web/



Official accounts of the MOD/SDF

You can view respective organizations' contents by accessing the following links.



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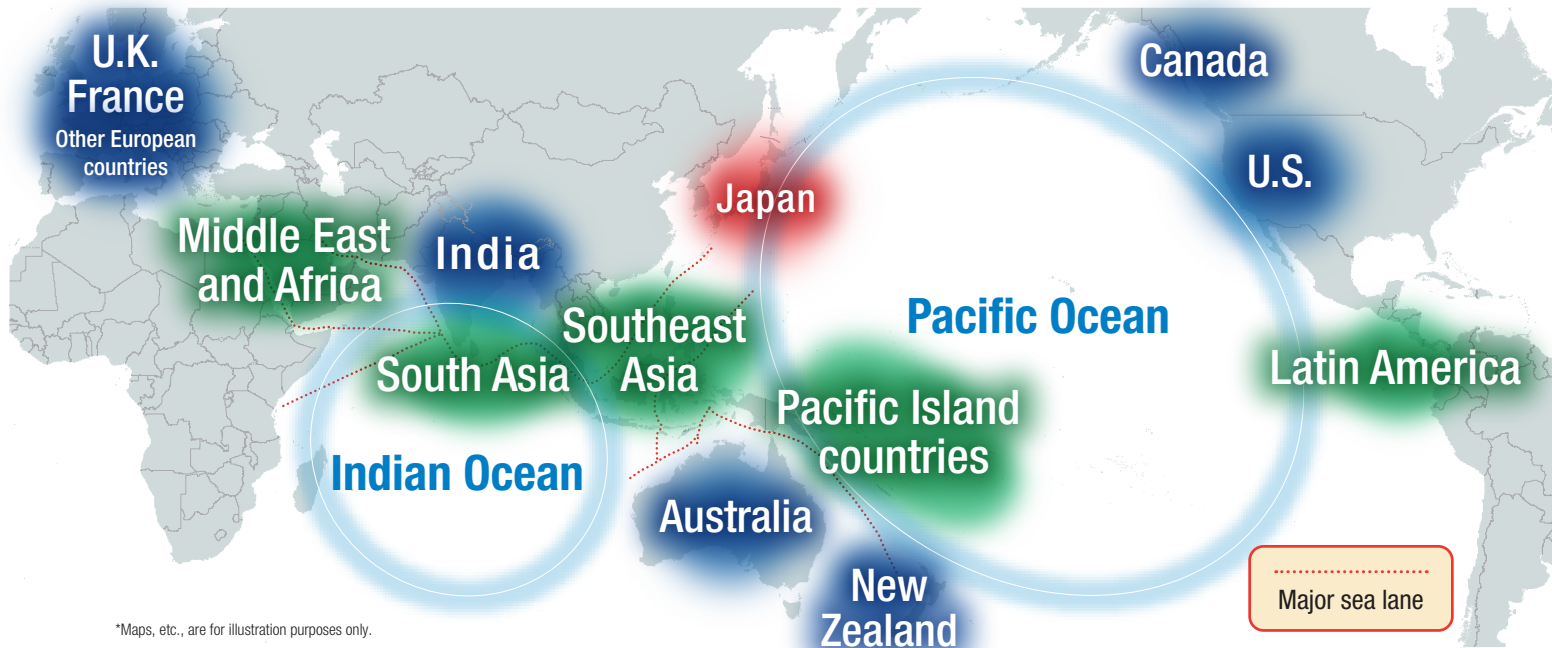


Artist behind the cover Mr. Nishimoto Yu-ki

Mr. Nishimoto is a sumi-e artist who uses both aggressive and sensitive strokes in his works to convey both lively and powerful expression. Using the techniques he has learnt, he seeks out new styles that differ from the traditional methods most commonly used. The cover artwork of this paper displays a powerful and dignified mounted samurai warrior, to represent the MOD/SDF's "strength" and the "solid defensive mindset" of Japan.

Defense Chronology

Free and Open Indo-Pacific



*Maps, etc., are for illustration purposes only.

The Indo-Pacific region is the core of the world's vitality, and home to half the world's population. Major sea lanes pass through the region. The "Free and Open Indo-Pacific" (FOIP) vision is rooted in the concept of ensuring the peace and prosperity of the entire Indo-Pacific region and consequently the world by realizing a free and open order based on the rule of law in the region. The FOIP is an inclusive vision. Any country can cooperate as long as it endorses the concept.



See information on the MOD's initiatives related to the FOIP in nine languages.

Continuation of Defense Cooperation and Exchanges Amidst the Spread of COVID-19

Although in-person visits to various countries have become difficult since the spread of COVID-19, defense cooperation and exchanges have been actively conducted through methods such as high-level telephone talks and video teleconference, bilateral/multilateral maritime exercises which do not involve contact with other people, and capacity building through online education. It has been pointed out that strategic competition may become more exposed and intense among countries intending to create international and regional orders more preferable to themselves and to expand their influence. Japan will promote defense cooperation and exchanges to uphold and reinforce FOIP in cooperation with other nations with which we share values and interests.



Japan-Germany Defense Ministerial Forum (December 2020)

Delivered an online capacity building program to the Papua New Guinea Defence Forces (March 2021)

Cooperation with Partners towards Upholding and Reinforcing FOIP

Towards upholding and reinforcing FOIP with the Japan-U.S. Alliance as its cornerstone, Japan actively cooperates with many countries that share the FOIP vision and have connections to the Indo-Pacific region, including Australia, India, European countries such as the United Kingdom, France, and Germany, as well as Canada and New Zealand.



Japan-U.S.-India-Australia Multilateral Exercise "Malabar 2020" (November 2020)

Countries and Regions Enhancing Cooperation towards Upholding and Reinforcing FOIP

With respect to countries and regions of the Indo-Pacific that key sea lanes pass through, such as Southeast Asian and South Asian countries, including ASEAN, and Pacific Island countries, as well as the Middle East, Africa and Latin America, which are important for ensuring energy security, Japan is bolstering cooperation towards upholding and reinforcing FOIP, while utilizing wide-ranging means of defense cooperation and exchanges.





Defense Chronology

Movements by the China Coast Guard

Activities by China Coast Guard Vessels around the Senkaku Islands

China is continuing and strengthening its unilateral attempts to change the status quo by coercion near the Senkaku Islands, an inherent territory of Japan, which is a situation that raises strong concerns. From April to August 2020, China Coast Guard vessels were confirmed to be within the contiguous zone near the Senkaku Islands for a record of 111 consecutive days. In addition, over the course of 2020, activities by China Coast Guard vessels within the contiguous zone near the Senkaku Islands were confirmed to have been conducted on 333 days by a total of 1,161 vessels, which were both all-time highs.



A 10,000-ton class Coast Guard Vessel, the largest of its kind in the world [The Japan Coast Guard]



General Secretary Xi Jinping attending the 5th plenary session of the 19th Central Committee of the Communist Party of China in October 2020 [China News Service/Jiji Photo]



[Website of the Cabinet Secretariat website] The Senkaku Islands, an inherent territory of Japan

2021.02

The Coast Guard Law of the People's Republic of China (Coast Guard Law), which stipulates the responsibility of the Coast Guard and its the Coast Guard's responsibilities and authority including the use of weapons, was newly enacted in January 2021 and entered into force in February 2021. The Coast Guard Law includes problematic provisions in terms of their inconsistency with international law. Sources of inconsistency include, among others, ambiguity as to geographical areas the Coast Guard Law applies and how the rules governing the use of weapons are implemented. The Coast Guard Law must not be allowed to infringe on the legitimate interests of the relevant countries including Japan. Furthermore, the raising of tensions in the East China Sea and other sea areas is completely unacceptable.

Entry into Force of China Coast Guard Law



See a summary of the Coast Guard Law of the People's Republic of China.



China Coast Guard vessels [The Japan Coast Guard]

North Korea's Nuclear and Missile Development

At the 8th Congress of the Korean Workers' Party (KWP) held in January 2021, Chairman Kim Jong-un of North Korea spoke about the further enhancement of nuclear and missile capabilities, referring to the advancement of nuclear technology, including the development of "tactical nuclear weapons," and preemptive and retaliatory nuclear strike capabilities, as well as development of "hypersonic gliding flight warheads" and so on.

In addition, the military parades in October 2020 and January 2021 featured a possible new ICBM-class ballistic missile, a possible new SLBM, and new ballistic missiles mounted on a five-axle TEL. Of these, the new ballistic missiles mounted on a five-axle TEL were launched in March 2021.



A possible new ICBM-class ballistic missile that appeared at a military parade in October 2020 [EPA/Jiji]



A new ballistic missile that appeared at a military parade in January 2021 (launched in March 2021) [AFP/Jiji]



A possible new SLBM that appeared at a military parade in January 2021 [EPA/Jiji]

Defense Chronology

Japan-U.S. Alliance

In the United States, President Biden was inaugurated in January 2021. As the security environment rapidly becomes increasingly severe, the Japan-U.S. Alliance has become more important than ever for regional peace and security. Japan and the United States affirmed that the Japan-U.S. Alliance will continue to be the cornerstone of peace, security and prosperity in the Indo-Pacific region, and renewed their unwavering commitment to the Alliance.



The Japan-U.S. Summit Meeting
[Twitter account of the Prime Minister's Office of Japan]



The Japan-U.S. Defense Ministerial Meeting



Response to COVID-19



Training on how to put on and take off protective clothing against infections

In order to prevent the spread of COVID-19, the MOD/SDF gathered all its strength to carry out various activities including disaster relief operations in 35 prefectures.

In addition, in order to accelerate the administering of COVID-19 vaccinations, the SDF opened up large-scale vaccination centers in Tokyo and Osaka, and is currently conducting vaccinations.

Dispatch of nurses and other personnel to medical institutions



Reference:
Efforts by the MOD/SDF in response to the spread of COVID-19



Video introducing the SDF's standards for preventing infectious disease



Disinfection of the medical equipment around beds

Transport of patients infected with COVID-19 by CH-47 from Yakushima Airport to Kagoshima City



Inside an aircraft during transport



Vaccinations at an SDF large-scale vaccination center



Large-scale vaccination center

Chronicle of Disaster Relief Operations

Lessons from the Great East Japan Earthquake

Strengthening the Joint Operational Posture

In 2015, the Bureau of Operational Policy was abolished and the functions of the Joint Staff were strengthened in order to centralize the operations of the SDF. In 2018, the Ground Component Command was newly formed to assume unified command over GSDF troops.



Joint transport in Sendai

Cooperation with related organizations, etc.

The MOD/SDF participates in the emergency team of the Prime Minister's Office and contributes to the government's unified decision-making. Liaison personnel are also dispatched to the local emergency headquarters in the disaster areas, the emergency headquarters of related companies, and others to grasp local needs.



General meeting at J-Village

Centralized transport of goods

The MOD recommended that the Government's Emergency Response Headquarters should conduct centralized management, including grasping the needs of municipalities and determining transport priorities, in order to quickly transport relief supplies to disaster areas. Currently, the Cabinet Office's emergency supplies procurement and transportation system for disaster management is centrally managing and coordinating everything from the procurement to transportation of relief supplies of various ministries and agencies, with active participation by the MOD.



At Minato Junior High School

Receiving support from various countries

Following the Great East Japan Earthquake, Japan received support from many countries, including the United States' Operation Tomodachi. The MOD/SDF has been constantly building relationships of trust and cooperation with various countries in the fields of humanitarian assistance and disaster relief.



Operation Tomodachi by the U.S. Army

Calling up SDF Reserve Personnel

In the aftermath of the Great East Japan Earthquake, SDF Reserve Personnel and Ready Reserve Personnel were called up for the first time outside of training. The MOD/SDF has been working on having the SDF Reserve Personnel conduct operations during disasters from regular times, and are making efforts to conduct practical training and more.



Activities of SDF Reserve Personnel

Mental health care

In regard to disaster related stress, the MOD/SDF is among other efforts, working to enhance education towards unit commanders by Mental Health Planning Officers and others, as well as conducting continual mental health checks immediately after the end of deployments.



Care by a Mental Health Planning Officer

Messages of thanks

After disaster relief operations are complete, many people have expressed their thanks to the SDF personnel. This includes thanks expressed to personnel involved in the operations while being disaster victims themselves.





Chronicle of Disaster Relief Operations

10 years after the Great East Japan Earthquake



See a summary of disaster relief operations to date.

1 Disaster relief operations in response to Typhoon Wipha in 2013 (Izu Oshima)

In October 2013, the MOD/SDF organized the Izu Oshima Disaster Joint Task Force to conduct disaster relief activities in Izu Oshima. From the perspective of conducting effective operations on remote islands, the Eastern Army Commanding General served as the Joint Task Force Commander so as to maximize the transport capabilities of the MSDF and ASDF, and enable centralized operations that leverage the organizational capabilities of the GSDF.

Activities by the Joint Task Force

2 Mt. Ontake disaster relief operations

In September 2014, following the eruption of Mt. Ontake in Nagano Prefecture, disaster relief operations were conducted to save lives.

Search at the top of the mountain

3 Disaster relief operations for the Kumamoto Earthquake

In April 2016, Kumamoto Prefecture was struck by a series of major earthquakes that registered a seismic intensity of 7 on the Japanese scale. The Joint Task Force, led by the Western Army Commanding General, was organized to respond. At this time, Japan and the United States jointly conducted disaster relief activities based on the new Guidelines for Japan-U.S. Defense Cooperation (the Japan-U.S. Guidelines) formulated in 2015.

At Vice-Camp Takayubaru (Kamimashiki-gun, Kumamoto)

2013



2014



2016



4

Torrential rains in July 2018 (Western Japan)

In 2018, the GSDF newly formed the Ground Component Command which enables the integrated operation of units, including in times of disaster. During the torrential rains of July 2018, the Ground Component Command quickly dispatched troops located throughout Japan to the disaster areas through transportation by PFI boat and other means, and swiftly had them execute operations to carry out various rescue missions.



Clearing roads



Support for the evacuation of residents following Typhoon Haishen in 2020



Torrential rains in July 2020



Torrential rains in July 2020

Present

5

In addition to responding to disasters that have become larger and more severe in recent years due to climate change and other factors, the MOD/SDF is engaged in disaster relief activities amid the spread of COVID-19 infections.



Activities on the *Diamond Princess*

Sense of mission of the SDF

Governor of Nagasaki Prefecture TAKADA Isamu, who exerted every effort for the disaster relief operations and reconstruction of the disaster areas following the June 1991 eruption of Fugen-dake of Mt. Unzen, stated the following about the sense of mission of the SDF.

“At the start, the citizens were instantly deprived of their peaceful lives, and they were at a loss for what to do. It was truly like a picture of hell. What did the citizens want the most at that time? They wanted to be shielded from the threat and terror of the mountain, and for the city to be safe. The SDF stood up to the menace of the mountain head-on. I will never forget it. On June 3, 1991, the day of the first unexpectedly huge pyroclastic flow, 43 precious lives were taken in an instant by the mountain. In order to fulfill the

wishes of the bereaved families who were holding onto a sliver of hope, on the following day, the SDF entered the area of the pyroclastic flow for three days in a row, even while another flow could have occurred at any time. It must have been so reassuring for the worried citizens. In modern times, when it is said that the value of a human life outweighs the Earth, I was deeply moved when I saw firsthand that the SDF had a sense of mission that was even heavier than the Earth and life itself. The citizens witnessed how SDF personnel are willing to risk their lives in times of crisis. We saw the true essence of the SDF.” -At the GSDF withdrawal ceremony at the Antoku Shore landfill site in Shimabara City (now the site of the Disaster Memorial Hall) on December 16, 1995

2018

4

2021

5

Challenges in the Space, Cyber and Electromagnetic Spectrum Domains

The Space, Cyber and Electromagnetic Spectrum Domains in Our Daily Life

Today, space has become an important infrastructure in a wide range of social, economic, scientific, and other fields with the launch of various observation satellites, communication and broadcasting satellites, positioning satellites, and more.

In addition, with the development of information and communications technology (ICT) in recent years, information and communications including networks such as the Internet have become indispensable in all aspects of people's lives. As a result, cyber attacks on information and communications networks can have a serious impact on people's lives.

The electromagnetic spectrum is used for a variety of purposes in our daily lives, including television, cell phone communications, and GPS location information. In these ways, the space, cyber and electromagnetic spectrum domains have become deeply ingrained in our daily lives, and the importance of these domains from the perspective of security is becoming very significant.

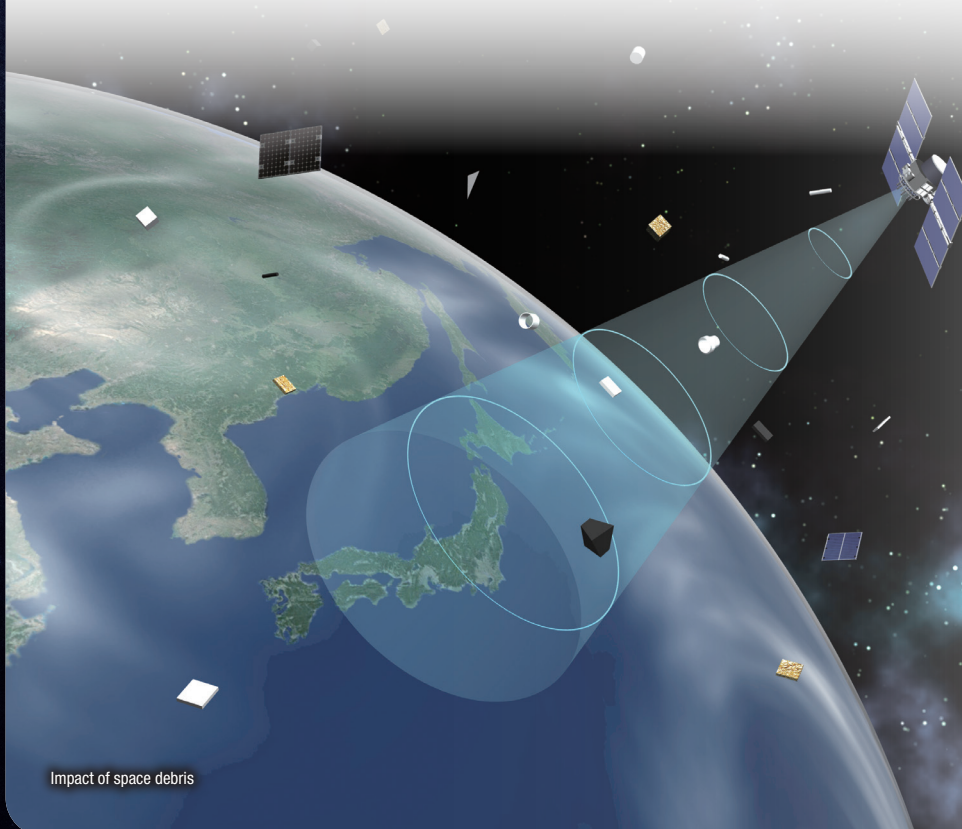
The Importance of the Space Domain

There are many people who use weather forecasts and map apps when they go out.

You may have experienced difficulties when you were out and ways communication was interrupted. The same is true for the SDF when they are deployed to various areas, where it is essential to grasp weather conditions and troop locations, and secure means of communication with allies.

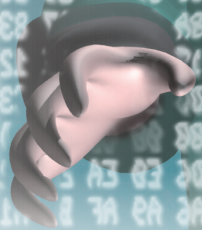
The SDF's activities, including daily information gathering and surveillance activities, are greatly supported by data and information obtained from satellites.

On the other hand, there is a growing risk that the functioning of satellites could be compromised due to the rapid increase in space debris and the development of anti-satellite weapons. Thus, securing the stable use of space has become an important issue.



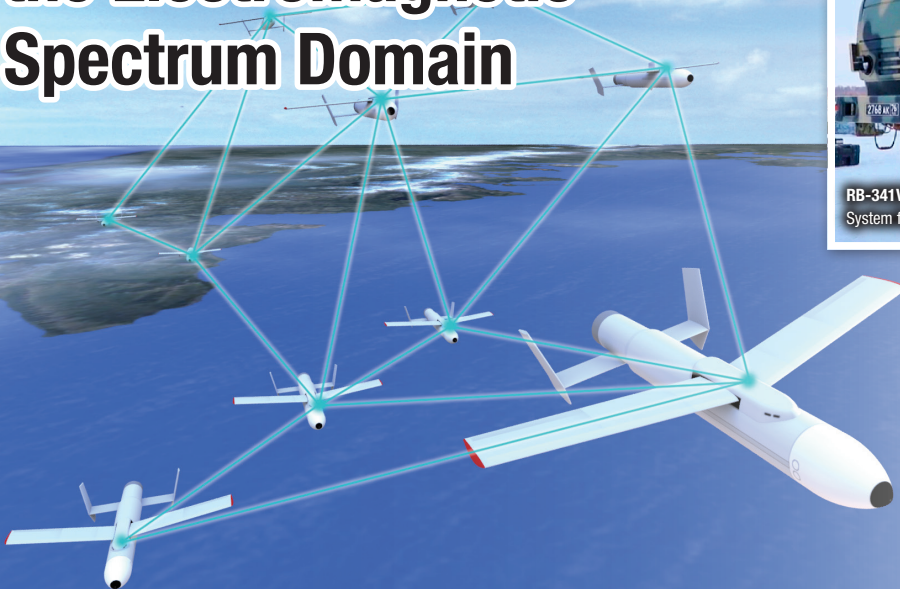
The Importance of the Cyber Domain

Information and communications networks form a foundation for the SDF's activities in various domains, and any attack against them would seriously disrupt the organized activities of the SDF. Cyber attacks are recognized as an asymmetric means of attack to impede the activities of adversaries at a low cost. It has been pointed out that militaries of various countries are trying to acquire the capability to neutralize command and control and communication functions by infiltrating networks and systems and embedding malware. There are also concerns that cyber attacks could lead to information theft and increased vulnerability of critical infrastructure and other assets. Stable use of the cyber domain is essential for the activities of the SDF and, by extension, for the security of Japan and its people.



Increasingly sophisticated and skillful cyber attacks by hackers

The Importance of the Electromagnetic Spectrum Domain



RB-341V Leer-3 (an example from Russia)
System for jamming cell phone signals with component UAVs

In recent years, militaries are becoming increasingly dependent on the electromagnetic spectrum due to the proliferation of telecommunication equipment, modernization of equipment, and technological advances. For example, technologies such as the networking of equipment and swarms of small unmanned aerial vehicles (UAVs) make the use of the electromagnetic spectrum essentials.

As a result, technologies to disrupt adversaries' use of the electromagnetic spectrum are also advancing, and there are reports of cases in other countries of interference with radio communications as well as interference with positioning signals to disrupt the activities of the UAVs. In this way, the electromagnetic spectrum is at the forefront of offense and defense in modern combat, and the SDF needs to strengthen its capabilities in the electromagnetic spectrum domain.

Drone swarms

Challenges in the Space, Cyber and Electromagnetic Spectrum Domains

Building a Multi-Domain Defense Force

To deter and counter qualitatively and quantitatively superior military threats, it is necessary to realize cross-domain operations that organically fuse capabilities in traditional domains-land, sea, and air-with capabilities in new domains-space, cyberspace and electromagnetic spectrum.



Establishment of the Space Operations Squadron (May 2020)
The Space Operations Group (tentative name) to be established in FY2021



Maneuver and deployment of mobile operating unit with advanced mobility and ISR capabilities

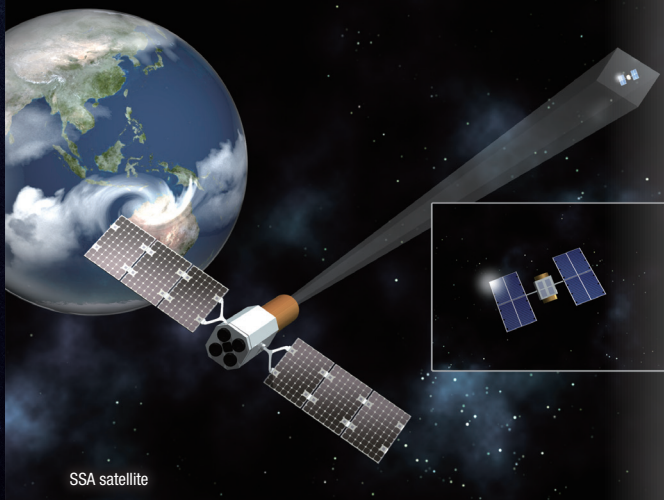


Surface unit engaged in Japan-U.S. bilateral training aimed at strengthening the ability of the Japan-U.S. Alliance to deter and counter threats

Capabilities in Space Domain

● Strengthening Space Situational Awareness (SSA)

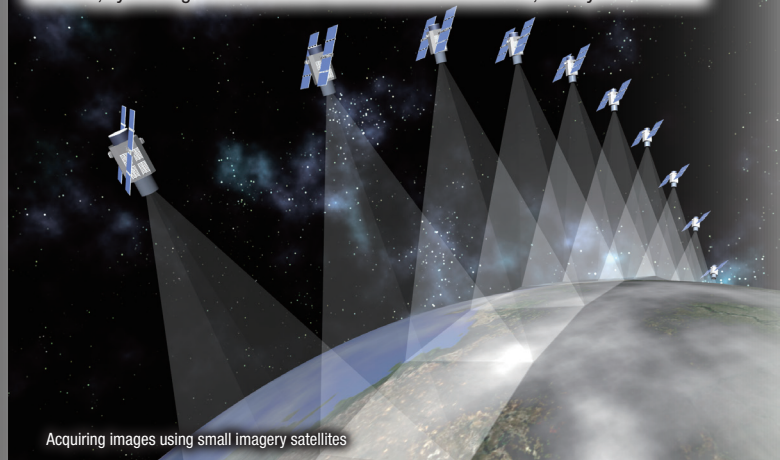
The ASDF playing a central role in cooperation with the U.S. military and others, Japan is strengthening SSA to monitor and avoid risks that could hinder the stable use of space.



SSA satellite

● Improving Various Capabilities that Use Space Including Information Gathering, Communication, and Positioning Capabilities

The MOD/SDF is enhancing various capabilities for information gathering, communication, and positioning using space by acquiring satellite images through the use of small satellite constellations, which are operated by a network of multiple small satellites, by utilizing X-band defense communications satellites, and by other means.



Acquiring images using small imagery satellites

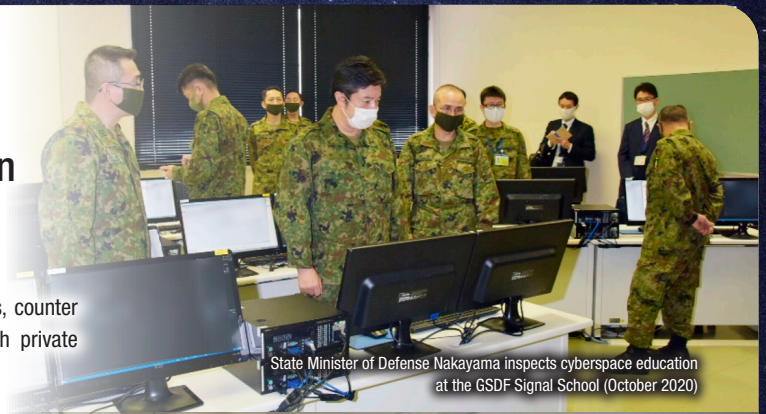
● Strengthening Resiliency in Use of Space

Japan is working to strengthen resiliency in the use of space through the multiplication and diversification of communication methods via satellites.

Capabilities in Cyber Domain

- **Keeping Abreast of the Latest Information Including Risks, Counter Measures and Technological Trends in Cyber Domain**

In order to keep abreast of the latest information, including cyber-related risks, counter measures and technological trends, the MOD/SDF effectively cooperates with private companies and foreign countries including the United States.



State Minister of Defense Nakayama inspects cyberspace education at the GSDF Signal School (October 2020)

- **Securing and Development of Cyber Workforce**

In addition to reinforcing cyber education within the organization, the MOD/SDF has held a cyber contest to identify highly skilled workforce with cybersecurity expertise and promoted the utilization of external human resources through, for example, initiatives for recruiting the Chief Cyber Security Advisors who have advanced knowledge.



The JSDF Cyber Defense Command (tentative name) to be established in FY2021

Capabilities in the Electromagnetic Spectrum Domain

- **Enhancing Ability to Manage and Coordinate the Electromagnetic Spectrum**

To ensure that the electromagnetic waves used by the SDF are effective in areas where electromagnetic waves used not only by the SDF but also by other parties are intermingled, the SDF is conducting research and building an operational framework to properly manage and coordinate electromagnetic waves.

- **Strengthening Capabilities to Neutralize Radar and Other Devices of Opponent**

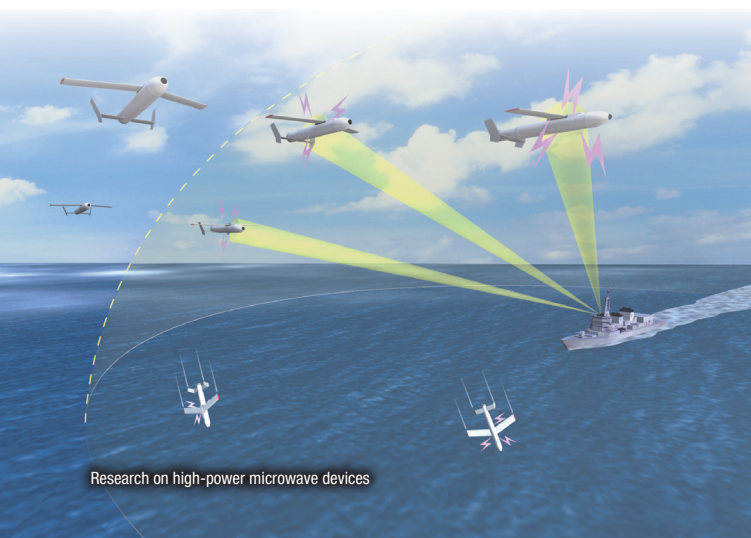


Acquisition of network electronic warfare systems



Development of stand-off electronic warfare aircraft

- **Research on Potentially Game-Changing Technologies**



Research on high-power microwave devices



Demonstration of laser system-mounted vehicles

Chapter 1 Overview

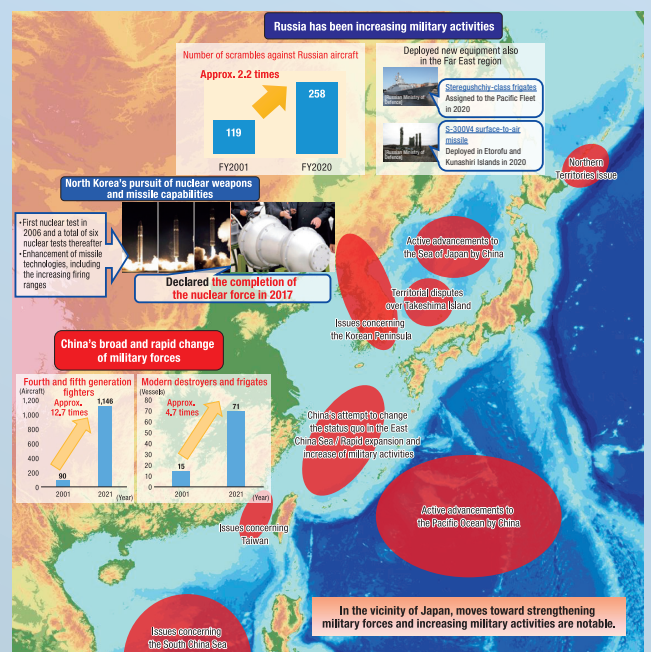
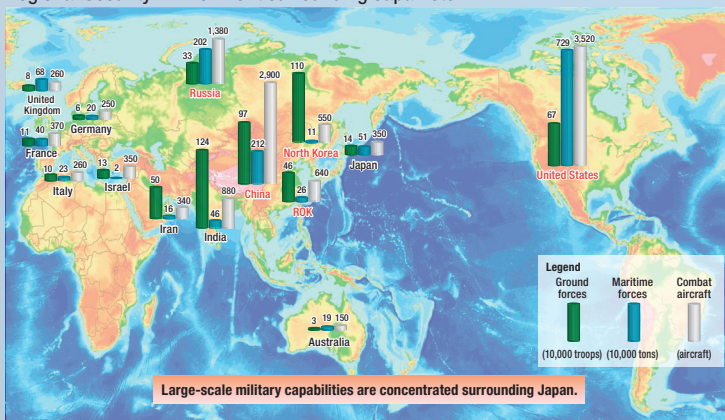
Current Trends in Security Environment

- Uncertainty over the existing order is increasing, and inter-state competition is becoming prominent across the political, economic and military realms.
 - Complex measures required due to “hybrid warfare”
 - Prolonged gray-zone situations
- Technological progress exerting significant influence on security
 - Importance of space, cyberspace, and electromagnetic spectrum domains
 - Game-changing technologies that could drastically change the conduct of future warfare (artificial intelligence (AI), hypersonic, and high-power energy technologies, etc.)
- Emergence of security challenges, which cannot be dealt with by a single country alone
 - Need to secure stable use of new domains including space and cyberspace; need to ensure security of maritime traffic; response to proliferation of weapons of mass destruction (WMDs); and response to international terrorism
- In relation to the COVID-19 pandemic, it has been pointed out that there have been moves by some countries with the intent to create international and regional orders more preferable to themselves and to expand their influence. There is a need to continue to monitor such moves as security issues with great concern.

Security Environment Surrounding Japan

- Military powers with high quality and quantity are concentrated in Japan's surroundings, where clear trends such as further military buildup and an increase in military activities are observed.
- A regional cooperation framework in the security realm has not been sufficiently institutionalized in the Indo-Pacific region and longstanding issues of territorial rights and reunification continue to remain.
- Recent years have seen a continued tendency towards the prolongation of “gray zone” situations that are associated with territories, sovereignty and economic interests, and such situations may increase and expand in the future.

Regional Security Environment surrounding Japan etc.



Chapter 2 United States

Inauguration of the Biden Administration

- The Biden administration was inaugurated in January 2021. Following on from the previous Trump administration, the Biden administration continues to focus on initiatives based on a tough stance towards China. At the same time, with the administration having set out a clear foreign policy direction based on international cooperation, attention should be paid to developments related to an overall review of U.S. security policy, which will be conducted with a focus on consultations with U.S. allies and partners.
- Based on the “America First” policy and the realist concept that power plays a central role, the Trump administration has significantly changed the patterns of U.S. involvement in the world. The administration set out a clear stance of emphasizing strategic competition with China, in particular, and also with Russia.

Security Policy under the Biden Administration

- President Biden expressed the basic stance that the United States will reengage itself in the world again by repairing its alliances, and lead the world not merely through demonstration of power, but with credibility and moral authority.
- President Biden also expressed his recognition that the United States would have to respond to a new era characterized by growing authoritarianism by countries such as China and Russia, and global issues such as the spread of infectious diseases, climate change, and nuclear proliferation.
- The Biden administration clarified its intent to conduct a global posture review of the U.S. forces, and announced that the United States would counter China over the long term, which the administration considers the only competitor potentially capable of sustainably challenging the international system, putting the highest priority on the military presence in the Indo-Pacific region.



President Biden delivering his inauguration speech (January 2021)
[U.S. Department of State]

Engagement in the Indo-Pacific Region, etc.

- The Trump administration rejected China’s attempt to impose the idea that “might is right” in the South China Sea and other waters, and deployed two Carrier Strike Groups in the South China Sea for the first time in six years to carry out naval exercises, while also indicating that the United States was reinforcing the implementation of the Freedom of Navigation Operations. President Biden reaffirmed that maintaining a “free and open Indo-Pacific” is a U.S. priority, and announced that the U.S. stance on this remains unchanged.
- The Biden administration emphasizes the importance of technology in defense policy, such as utilizing emerging technologies and dealing with the associated risks, and enhancing capabilities in cyberspace. The administration also expressed the view that technological competition will become one of the central issues in the strategic competition with China.



Nimitz and Ronald Reagan Carrier Strike Groups conducting exercises in the South China Sea (July 2020) [U.S. Navy]

Chapter 2 China

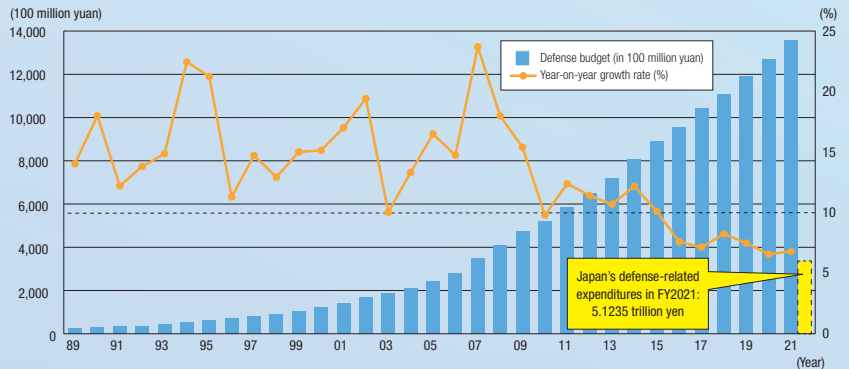
General Situation

- Chinese military trends, combined with insufficient transparency about China's defense policies and military affairs, have become a matter of grave concern to the region including Japan and the international community.
- It is strongly hoped that China will play active roles in the region and the international community in a more cooperative manner.

Enhancement of Operational Capabilities

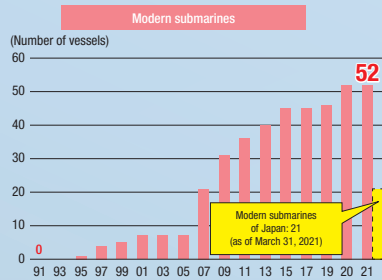
- China has sustained high-level growth of its defense budget without transparency, engaging in broad, rapid improvement of its military power in qualitative and quantitative terms with focus on nuclear, missile, naval and air forces. In doing so, it has attached importance to ensuring superiority in the new domains including cyber, electromagnetic spectrum, and space.
- While implementing a policy of civil-military fusion across the board, China is striving to develop and acquire cutting-edge technologies that can be used for military purposes.
- At the Standing Committee of the China's National People's Congress in December 2020, the revised National Defense Law was adopted, in which protecting China's overseas interests, penetration of "Xi Jinping Thought of Strong Military," and space, electromagnetic spectrum, and cyberspace as critical security areas, etc., were newly stipulated. It is assumed that China is aiming to create the impression that it has achieved major policy and system reforms. Going forward, attention should be paid to China's activities abroad and in new domains.

Changes in China's Defense Budget

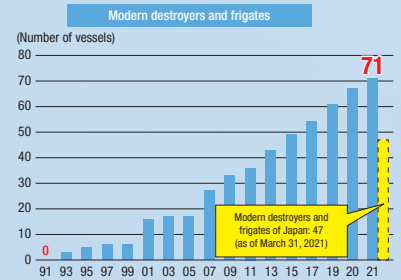


Note: This basically shows the defense budget within "the central government's general public budget," which had been named as "the central fiscal expenditures" prior to FY2014. Year-on-year growth rate compares the budget of a given year against the initial budget of the previous year. Note that FY2002 defense budget was calculated based on the increased amount from the defense budget in the previous FY because only the amount and rate of growth were released. For FY2016, FY2018, FY2019, FY2020 and FY2021, the amount of "the central government expenditures," which are part of the central government's general public budget, are used because only the central government expenditures were announced.

Major Chinese Navy and Air Force Capabilities

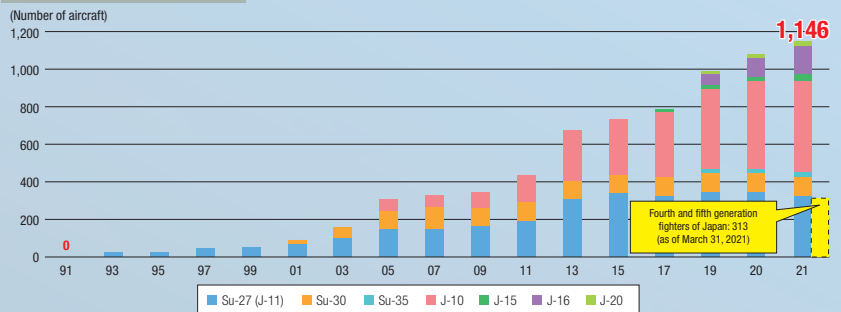


* Total number of Jin-class, Shang-class, Song-class, Yuan-class and Kilo-class submarines



*1 Total number of Renhai-class, Luhai-class, Luhai-class, Sovremennyy-class, Luyang-class and Luzhou-class destroyers, and Jiangwei-class and Jiangkai-class frigates.
*2 Additionally, China also has 50 Jiangdao-class corvettes (2021).

Fourth and fifth generation fighters

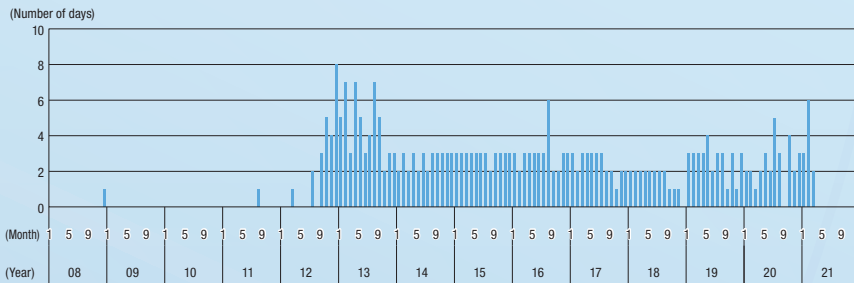


DF-17 Medium Range Ballistic Missile (MRBM), which is viewed as being capable of carrying a Hypersonic Glide Vehicle (HGV) [Avalon/Jiji Press Photo]

Activities in the Surrounding Sea Area and Airspace of Japan

- China has relentlessly continued attempts to unilaterally change the status quo by coercion in the sea area around the Senkaku Islands, leading to a grave matter of concern. Its actions involving unilateral assertions over Japan's territorial waters around the Senkaku Islands are, fundamentally, a violation of international law.
- In February 2021, the China Coast Guard Law, which stipulates the responsibility of the Coast Guard and its authority including the use of weapons, entered into force. The Coast Guard Law includes problematic provisions in terms of their inconsistency with international law. Sources of inconsistency include, among others, ambiguity as to geographical areas the Coast Guard Law applies and how the rules governing the use of weapons are implemented. The Coast Guard Law must not be allowed to infringe on the legitimate interests of the relevant countries including Japan. Furthermore, the raising of tensions in the East China Sea and other sea areas is completely unacceptable.

Changes in number of days on which China Coast Guard vessels, etc. intruded into the Japanese territorial waters

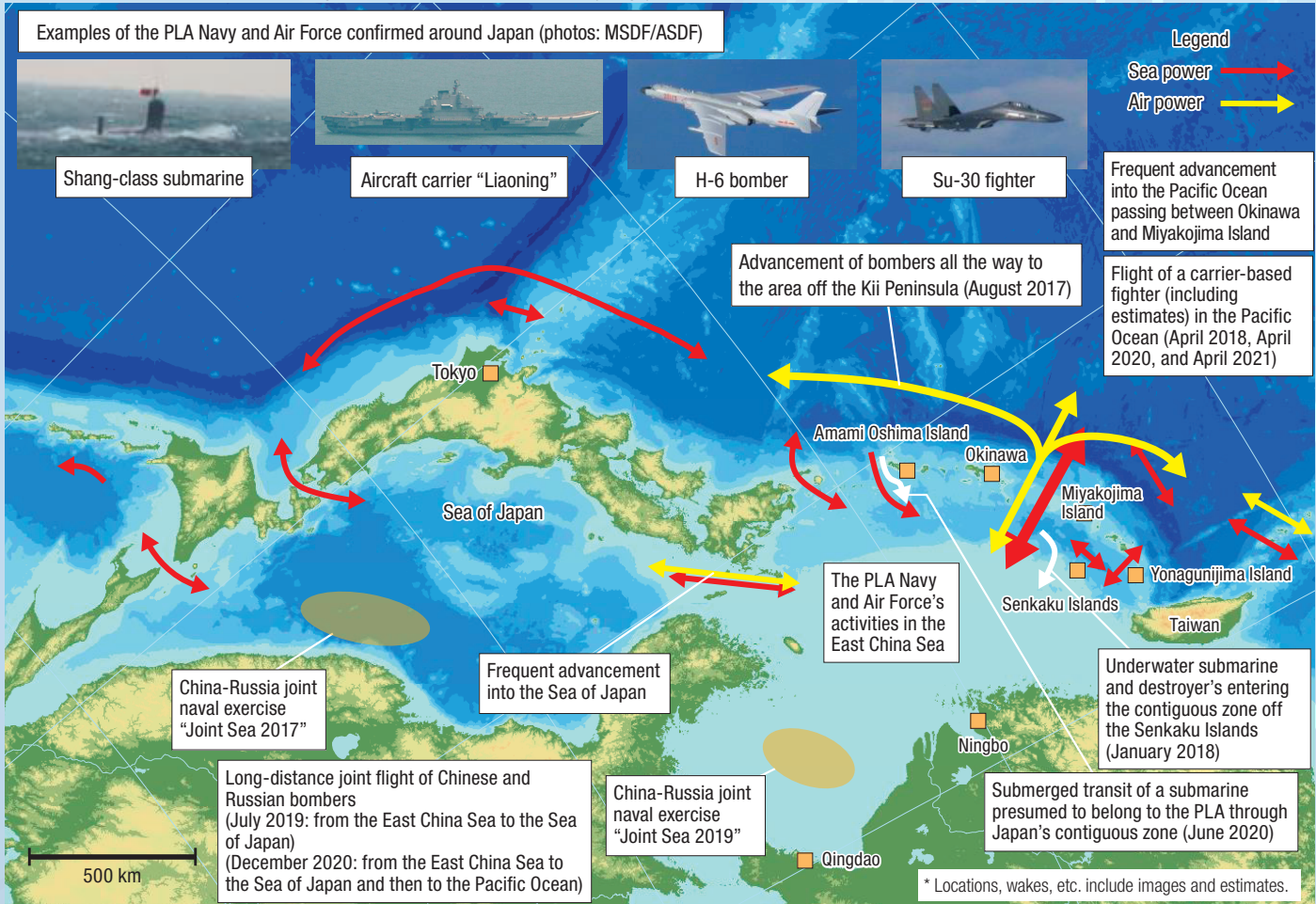


Identification in the contiguous zone

Year	Number of days (days)	Total number of identified vessels (vessels)
2012	79	407
2013	232	819
2014	243	729
2015	240	709
2016	211	752
2017	171	696
2018	158	607
2019	282	1,097
2020	333	1,161
2021	81	300

* The figure for 2012 is that from September to December, and the figure for 2021 is as of the end of March.

PLA's Recent Activities in the Surrounding Sea Area and Airspace of Japan (image)



Relations between the United States and China, etc.

U.S.-China Relationship

- In recent years, competition between the United States and China is becoming more prominent across the political, economic and military realms, with both countries making moves to keep each other in check. In particular, competition in technological fields is likely to become even more intense.
- As China rapidly enhances its military power, changes in the military power balance between the United States and China may possibly affect the peace and stability of the Indo-Pacific region. It is necessary to pay greater attention to the military trends of the two countries in areas such as the South China Sea and Taiwan.
 - In the South China Sea, China is expanding its military activities, including ballistic missile launches and military exercises involving aircraft carriers. Meanwhile, in July 2020, the United States criticized China's claims of maritime interests as being illegal, and toughened its stance against China further by implementing Freedom of Navigation Operations and military exercises involving aircraft carriers.
 - At a US Senate hearing, the Commander of the US Indo-Pacific Command indicated that the military balance in the Indo-Pacific is becoming more unfavorable for the United States and its allies and that they are accumulating risk that may embolden China to unilaterally change the status quo. Furthermore, he testified that China's ambitions towards Taiwan will manifest itself in the next six years.

Taiwan

- China has further intensified military activities around Taiwan including Chinese aircrafts' entering the southwestern airspace of Taiwan. In the meantime, the United States has demonstrated a clear stance of supporting Taiwan in military aspects, such as transits by U.S. vessels through the Taiwan Strait and weapon sales. Stabilizing the situation surrounding Taiwan is important for Japan's security and the stability of the international community. Therefore, it is necessary that we pay close attention to the situation with a sense of crisis more than ever before.
- The overall military balance between China and Taiwan is tilting to China's favor, and the gap appears to be growing year by year. Attention should be paid to trends such as the strengthening of Chinese and Taiwanese forces, the sale of weapons to Taiwan by the United States, and Taiwan's own development of its main military equipment.

North Korea

Overview

- Military trends in North Korea pose grave and imminent threats to Japan's security.
- North Korea has conducted six nuclear tests in the past and is proceeding with ballistic missile development at an extremely rapid pace. It is believed that North Korea already has the ability to attack Japan with nuclear weapons fitted to ballistic missiles, within whose range Japan lies.
- North Korea has developed more advanced missile-related technologies in recent years, trying to breach missile defense networks by developing ballistic missiles that use solid fuel and fly at lower altitudes than conventional ballistic missiles on irregular trajectories. There are concerns that such advanced technologies will be applied to longer-range missiles.
- North Korea is relentlessly pursuing increasingly complex and diverse modes of attack and is steadily strengthening and improving its attack capabilities. These enhancements in its capabilities make early detection of the signs of a launch and the interception of the missiles more difficult, thereby posing new challenges for the information gathering, early warning, and interception postures of relevant countries, including Japan.
- In March 2021, North Korea launched new types of ballistic missiles.



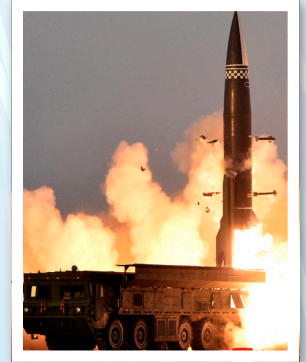
A possible new ICBM-class ballistic missile that appeared at a military parade (October 2020) [EPA/Jiji]



A possible new SLBM that appeared at a military parade (January 2021) [EPA/Jiji]

Future Trends Regarding Weapon Development

- At the 8th Congress of the Korean Workers' Party (KWP) in January 2021, North Korea made specific remarks on the development of various weapons such as multi-warhead technology, "hypersonic gliding flight warheads," nuclear-powered submarines, and solid fuel-propelled ICBMs, thereby announcing the stance that it is reinforcing its military capabilities.
- North Korean military parades in October 2020 and January 2021 showcased a possible new ICBM-class ballistic missile that appeared at a military parade, a possible new SLBM that appeared at a military parade referred to as Pukguksong-4 and Pukguksong-5, and a new type of ballistic missile (launched in March 2021).



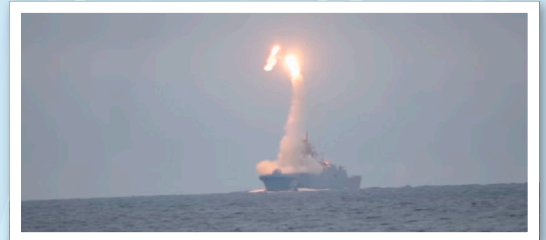
New type of ballistic missile (March 2021)
 [AFP/Jiji]

Chapter 2

Russia

Overview

- Russia is modernizing its military equipment, including strategic nuclear forces, and is gradually enhancing the deployment capability of its military forces in remote areas by securing military bases outside Russia.
- Russia is promoting the development of hypersonic weapons and other new types of weapons, while also intensifying activities in new domains such as space and electromagnetic spectrum.



Launch of the Russian Zircon hypersonic cruise missile (October 2020)
 [Official YouTube channel of the Ministry of Defence of Russia]

Activities in Japan's Northern Territories and the Vicinity of Japan

- In addition to a trend of increasing activity by Russian armed forces in the vicinity of Japan, Russia has also shown a recent tendency to deploy the latest equipment in the Far East region.
- In the strategic nuclear forces exercises conducted in December 2020, a Borey-class SSBN deployed in and around the Sea of Okhotsk fired a new SLBM for the first time.
- In December 2020, the Ministry of Defence of Russia announced the full deployment of the S-300V4 surface-to-air missile system in Etorofu and Kunashiri Islands.

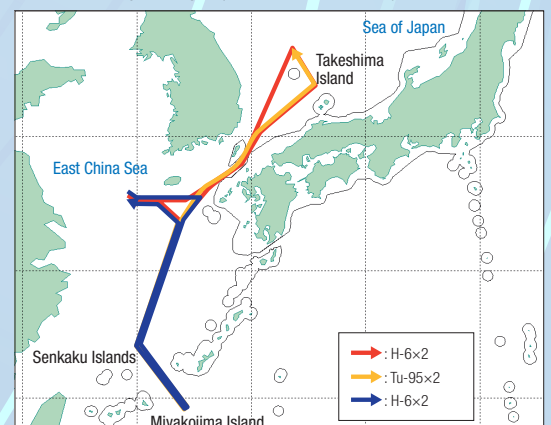


S-300V4 surface-to-air missile system deployed in Etorofu and Kunashiri Islands
 [Russian Ministry of Defence]

Advancement in the Military Cooperation with China

- In December 2020, Russian Tu-95 bombers, along with Chinese H-6 bombers, carried out long distance joint flights from the Sea of Japan to the East China Sea and the Pacific Ocean. The China-Russia joint flight is the second such incident following one in July 2019.
- In response to a question regarding the Chinese-Russian military alliance, President Putin remarked, "Theoretically, it is possible to envisage a military alliance."
- In December 2020, the Chinese and Russian Ministers of Defense agreed to extend the bilateral cooperation agreement on the launch notification for ballistic missiles and other missiles for 10 years.

China-Russia joint flight (December 22, 2020)



Trends Concerning New Domains and Relevant Challenges Facing the International Community

Military Science and Technology

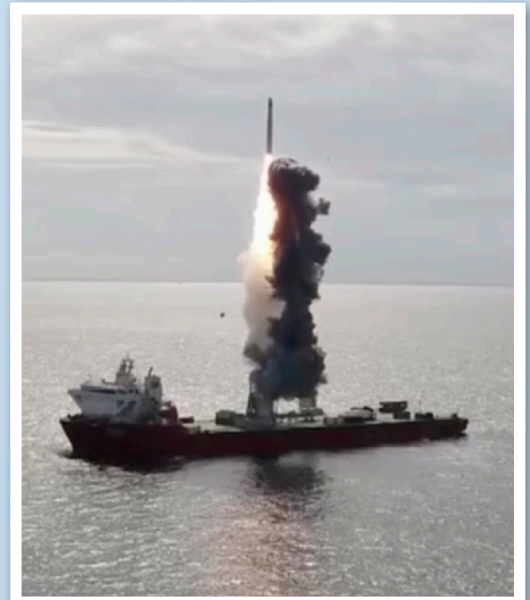
- Major countries are focusing on the development of advanced technologies that can be game-changing technologies and drastically change the future of warfare (artificial intelligence (AI), hypersonic, and high-power energy technologies, etc.). Some advanced technologies in the civilian sector have been transferred to military technologies.
- As it is being pointed out that China has attempted to obtain advanced technologies from other countries, protection of technologies is also an important issue.



Simulated battle between AI and U.S. Air Force Pilot [DARPA]

Space Domain

- In outer space, various countries are rapidly developing capabilities to ensure their military superiority, such as reconnaissance, communication, and positioning satellites. On the other hand, these countries are also emphasizing the development of their capabilities to impede each other's use of outer space. Recent major trends among the major countries are as follows.
 - United States: In the Defense Space Strategy, the United States assessed that China and Russia present the most immediate and serious threat to the country. The United States is also advancing plans for a satellite mega-constellation.
 - China: China has actively advanced space development including launching a Mars probe, developing a communication satellite constellation plan, and launching a rocket from a ship on the Yellow Sea. China has completed the launch of all satellites that constitute the BeiDou Navigation Satellite System.
 - Russia: Russia has increased its space activities, including conducting two launch tests of a ground-launched anti-satellite missile (U.S. announcement).



Launch of the "Long March 11" from the Yellow Sea [Jij]

Cyber Domain

- It is pointed out that China, Russia, and North Korea have been conducting increasingly diverse and aggressive cyber attacks. Recent major cyber attacks are as follows.
 - China: An actor with ties to China's Ministry of National Security conducted cyber attacks on private-sector companies that were involved in the development of the COVID-19 vaccine (announced by the United States, July 2020).
 Cyber attacks that are highly likely to have the involvement of the Chinese People's Liberation Army's units against approximately 200 domestically based Japanese companies and other entities (announced by Japan, April 2021)
 - Russia: The Main Intelligence Directorate of the General Staff of the Russian Armed Forces (GRU) was responsible for the cyber attack on the electricity grid in Ukraine and the cyber activities targeting the PyeongChang Olympics (announced by the United States, October 2020)
 Russia conducted cyber reconnaissance on organizations related to the Tokyo Olympic Games (announced by the United Kingdom, October 2020)
 Russia's Foreign Intelligence Service (SVR) was responsible for cyber attacks targeting U.S. government agencies (announced by the United States, April 2021)
 - North Korea: Cyber attacks by North Korean Army's Reconnaissance Bureau (announced by the United States, February 2021)



Press announcement by Assistant Attorney General for National Security [U.S. Department of Justice]

Electromagnetic Domain

- Major countries are also developing equipment for severe electronic warfare environments and conducting electronic warfare-oriented exercises.

Climate Change

- Recognizing climate change as a security issue is shared among countries (risk of inducing and/or exacerbating conflicts over land and resources, risk of inducing social and political tensions and conflicts due to large-scale migration).
- It was pointed out that the impacts of climate change can undermine the stability of vulnerable nations. In addition to the increasing need for international assistance, including military operations, there are also moves by countries to strengthen their military posture in the Arctic areas. In terms of the direct impact on militaries, various possibilities were pointed out including increased deployment opportunities for rescue operations, increased burdens on equipment and bases, and growing demands to implement environmental measures.



Japan's Security and Defense Policy

Chapter 2

Japan's Security and Defense Policy

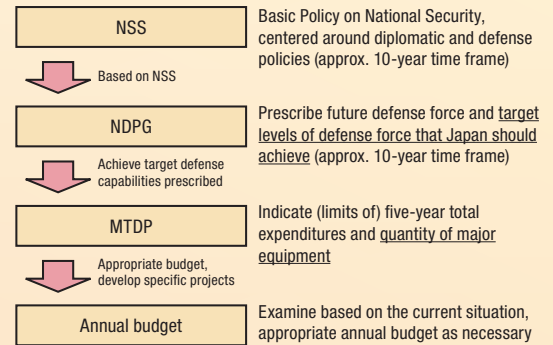
National Security Strategy (NSS)

The NSS developed in December 2013 specifies, as Japan's fundamental principle of national security, that Japan will contribute more proactively than ever before to the peace, stability, and prosperity of the international community, while committed to continuing the path as a peace-loving nation, and seeking its own security as well as peace and stability in the Asia-Pacific region from the perspective of a "Proactive Contribution to Peace" based on the principle of international cooperation.

The National Defense Program Guidelines for FY2019 and Beyond (NDPG)

- The National Defense Program Guidelines for FY2019 and Beyond (NDPG) formulated in December 2018 stipulates that the Ministry of Defense (MOD) / Self-Defense Forces (SDF) will build a Multi-Domain Defense Force with the following characteristics as a truly effective defense capability, in light of the increasingly severe and uncertain security environment surrounding Japan.
 1. Being able to execute cross-domain operations, which organically fuse capabilities in all domains, including space, cyberspace and electromagnetic spectrum to generate synergy and amplify the overall strength
 2. Being capable of sustained conduct of flexible and strategic activities during all phases from peacetime to armed contingencies
 3. Being capable of strengthening the ability of the Japan-U.S. Alliance to deter and counter threats as well as promoting multi-faceted and multi-layered security cooperation

Relationship among the NSS, the NDPG, the MTDP, and the fiscal year budget



Japan's Basic Defense Policy

The following are set forth as national defense objectives:

- to create, on a steady-state basis, a security environment desirable for Japan by integrating and drawing on the strengths at the nation's disposal;
- to deter threats from reaching Japan by making opponents realize that doing harm to Japan would be difficult and consequential; and
- should a threat reach Japan, to squarely counter the threat and minimize damage.

Japan will strengthen each of the means by which it will successfully achieve these national defense objectives: Japan's own architecture for national defense; the Japan-U.S. Alliance; and international security cooperation.

Priorities in Strengthening Defense Capability

In order to adapt to increasingly rapid changes in the security environment, Japan will enhance priority capability areas as early as possible.

- Strengthening Capabilities Necessary for Cross-Domain Operations:
 - Strengthening capabilities in new domains including space, cyberspace and electromagnetic spectrum.
 - Strengthening capabilities in the traditional domains, such as capabilities in maritime and air domains, stand-off defense capability, comprehensive air and missile defense capability, and maneuver and deployment capability.
 - Strengthening sustainability and resiliency by promoting necessary measures for securing ammunition and fuel, ensuring maritime shipping lanes, and protecting important infrastructure.
- Strengthening core elements comprising defense capability:
 - Strengthening core elements of defense capability by reinforcing the human resource base, technology base, and defense industrial base, reviewing equipment structure, etc.

Medium Term Defense Program (FY2019–FY2023; MTDP)

- The MTDP, formulated in December 2018, sets forth the policy for the build-up of defense capability, and the main projects for the five-year period from FY2019 to FY2023.
- The MTDP sets forth the following five basic policies: 1. Acquiring and strengthening capabilities essential for realizing cross-domain operations; 2. Improving the efficiency of acquisition of equipment and reinforcing the technology base; 3. Reinforcing the human resource base; 4. Strengthening the Japan-U.S. Alliance and security cooperation; 5. Greater efficiency and streamlining in the build-up of defense capability.

Chapter 4

Build-up of Defense Capability and Defense-Related Expenditures in FY2021

Build-up of Defense Capability in FY2021

In FY2021, as the third year of the NDPG and the MTDP, the MOD/SDF will steadily implement initiatives toward building a Multi-Domain Defense Force based on the NDPG and the MTDP.

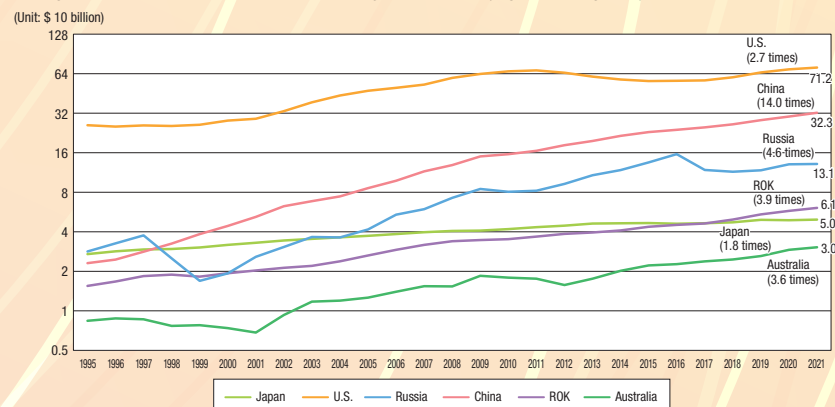
Main Projects of Build-up of Defense Capabilities in FY2021 (Priorities in strengthening capabilities necessary for cross-domain operations)

Capabilities that should be acquired and strengthened	Outline	
Capabilities in space domain	<ul style="list-style-type: none"> ○ Procurement of SSA satellite (space-based optical telescope) ○ Development of SSA systems 	<ul style="list-style-type: none"> ○ Strengthening information-gathering capability using outer space ○ Establishment of Space Operations Group (tentative name), etc.
Capabilities in cyber domain	<ul style="list-style-type: none"> ○ Enhancement of Cyber Defense Group, etc. <ul style="list-style-type: none"> ● Establishment of the JSDF Cyber Defense Command (tentative name) as a joint unit ○ Securing and developing of cyber workforce 	<ul style="list-style-type: none"> ○ Utilization of cutting-edge cyber technologies in the field of cyberspace ○ Improving security of system networks, etc.
Capabilities in electromagnetic domain	<ul style="list-style-type: none"> ○ Reinforcement of the capabilities for neutralizing the radar of an opponent invading Japan <ul style="list-style-type: none"> ● Development of stand-off electronic warfare aircraft ○ Strengthening of capability to minimize electromagnetic jamming from an opponent attempting to invade Japan <ul style="list-style-type: none"> ● Procurement of F-35A (×4) and F-35B (×2) fighters with superior electronic protection capability 	<ul style="list-style-type: none"> ○ Enhancement of systems of electronic warfare units <ul style="list-style-type: none"> ● Establishment of the GSDF Electronic Operations Unit (tentative name) ○ Strengthening intelligence capability related to the electromagnetic spectrum, etc.
Capabilities in Maritime and Air Domains	<ul style="list-style-type: none"> ○ Procurement of P-1 patrol aircraft (×3) ○ Refurbishment of SH-60K patrol helicopter to rescue specification ○ Procurement of US-2 search and rescue amphibian (×1) 	<ul style="list-style-type: none"> ○ Construction of destroyers (×2) and a submarine ○ Refurbishment of Izumo-class destroyers ○ Japan-led development of F-X, etc.
Stand-off defense capability	<ul style="list-style-type: none"> ○ Procurement of stand-off missile, etc. 	
Comprehensive air and missile defense capability	<ul style="list-style-type: none"> ○ Procurement of PAC-3MSEs ○ Research on HGV intercept system 	<ul style="list-style-type: none"> ○ Technical assistance service related to the study of the Aegis system-equipped vessel, etc.
Maneuver and deployment capability	<ul style="list-style-type: none"> ○ Procurement of Type-16 mobile combat vehicles (×22) ○ Reorganization of the 2nd Division into a Rapid Deployment Division 	<ul style="list-style-type: none"> ○ Maneuver, deployment and field training in remote islands by rapid deployment division and brigade ○ Procurement of C-2 transport aircraft (×1), etc.
Sustainability and resilience	<ul style="list-style-type: none"> ○ Procurement of various ammunition necessary for continuous unit operation ○ Promotion of measures against aging and earthquake proofing of SDF facilities 	<ul style="list-style-type: none"> ○ Ensuring necessary expenses for sustainment and maintenance of equipment, etc.

Defense-Related Expenditures

In order to adapt to increasingly rapid changes in the security environment, Japan must strengthen its defense capability at speeds that are fundamentally different from the past. To this end, in light of the NDPG and the MTDP, defense-related expenditures for FY2021 were increased by 54.7 billion yen from the previous fiscal year to 5.1235 trillion yen (an increase of 1.1% from the previous year). Defense-related expenditures have increased for nine consecutive years.

Changes in Defense Expenditures in Six Major Countries (logarithmic graph)



(Notes)

- Regarding the defense expenditures of the five countries, figures officially published by the government of each country were converted into US dollars amounts, using the purchasing power parity for 2020 (published by the OECD: as of April 2021). The figures for 2021 were converted into US dollars using the purchasing power parity of 2020. (1 dollar = 103.412076 yen = 4.200808 yuan = 0.740525 rubles = 869.063949 won = 1.461587 Australian dollars = 0.716264 pound = 0.740525 France euros = 0.744679 Germany euros)
- Japan's defense-related expenditure shows its initial budget (excluding SACO-related expenses, the U.S. Forces realignment-related expenses (the portion allocated for mitigating the impact on local communities), and expenses for the three-year emergency response plan for disaster prevention, disaster mitigation, and building national resilience, etc.)
- Regarding the United States, the figures for FY2021 are estimates.
- The amount and year-on-year growth rate (figures rounded to one decimal place) for FY1995-FY2021 are indicated.



Three Pillars of Japan's Defense (Means to Achieve the Objectives of Defense)

Chapter 1

Japan's Own Architecture for National Defense

Response from Peacetime to Gray Zone Situations

Persistent Intelligence, Surveillance and Reconnaissance (ISR) in the Area Surrounding Japan

- The Self-Defense Forces (SDF) is engaged in persistent intelligence collection and monitoring and surveillance during peacetime over Japan's territorial waters and airspace, as well as the surrounding sea and airspace so that it can respond to various contingencies immediately and seamlessly.



GSDF personnel engaged in warning and surveillance activities



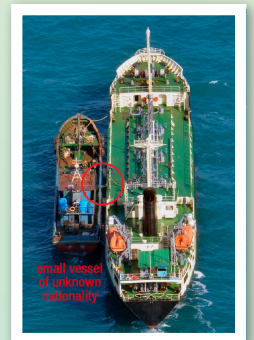
MSDF P-1 patrol aircraft conducting warning and surveillance activity in the area surrounding Japan



ASDF radar site engaging in warning and surveillance activities 24 hours a day and 365 days a year

Response to Illicit Ship-to-Ship Transfers

- As part of its regular warning and surveillance activities in sea areas surrounding Japan, the SDF is gathering information on vessels suspected of violating the UN Security Council Resolutions. From 2018 to the end of March 2021, the SDF has observed 24 cases of illicit ship-to-ship transfer by North Korean vessels.
- In response to these illicit maritime activities, including ship-to-ship transfers, the United States, Australia, Canada, France and New Zealand carried out surveillance activities with aircraft using the U.S. Kadena Air Base in Japan. In addition, naval vessels of Australia, Canada, France, the United Kingdom and the United States conducted surveillance activities in sea areas surrounding Japan.



A North Korea-flagged tanker strongly suspected of committing a ship-to-ship transfer (December 2019)

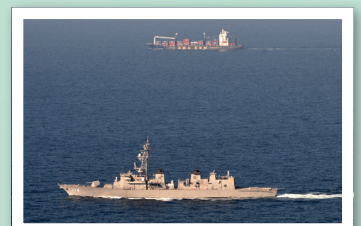
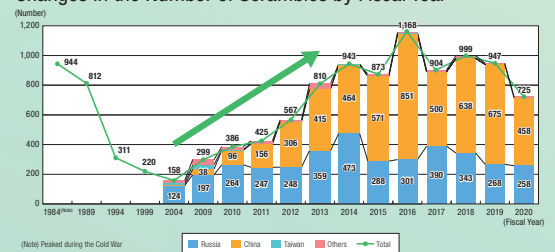
Warnings and Emergency Takeoffs (Scrambles) in Preparation against Intrusion of Territorial Airspace

- The Air Self-Defense Force (ASDF) detects and identifies aircraft flying in airspace surrounding Japan using warning and control radars as well as early-warning and control aircraft. If any suspicious aircraft heading to Japan's territorial airspace are detected, fighters and other aircraft scramble to approach them in order to confirm the situation and monitor the aircraft as necessary.
- In FY2020, ASDF aircraft scrambled 725 times.

Information Gathering Activities for Ensuring the Safety of Japan-related Vessels in the Middle East

- As the information gathering activities for ensuring the safety of Japan-related vessels in the Middle East, the MOD dispatched a destroyer as the Deployment Surface Force for Information Gathering and also used two fixed-wing patrol aircraft (P-3C) of the Deployment Air Force for Counter Piracy Enforcement (DAPE).

Changes in the Number of Scrambles by Fiscal Year

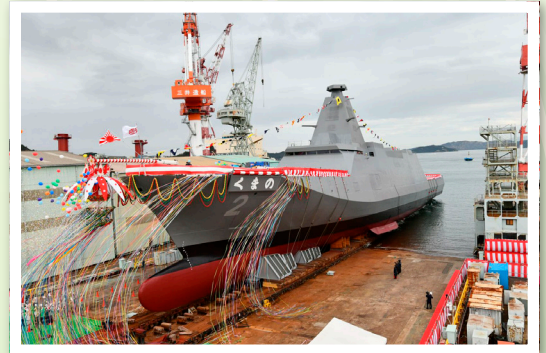


Destroyer JS "Suzunami" engaging in information gathering activities in the northern part of the Arabian Sea

Defense of Japan including its Remote Islands

Defense of Japan's Remote Islands

- In response to attack on Japan including its remote islands, the SDF will quickly maneuver and deploy requisite units to block access and landing of invading forces while ensuring maritime and air superiority. Even when maintaining maritime and air superiority becomes untenable, the SDF will block invading forces' access and landing from outside their threat envelopes. Should any part of the territory be occupied, the SDF will retake it by employing all necessary measures.
- As part of measures to enhance the persistent ISR posture, the SDF has launched a new type of destroyer (FFM) and acquired E-2D airborne early warning aircraft.



Naming and launching ceremony for the new type of Destroyer JS "Kumano" (November 2020)

Response to Missile Attacks

- Currently, Japan's Ballistic Missile Defense (BMD) is an effective multi-layered defense system with the upper tier interception by Aegis equipped destroyers and the lower tier by Patriot PAC-3, both interconnected and coordinated by the Japan Aerospace Defense Ground Environment (JADGE).
- In order to counter increasingly complex and diverse airborne threats, and minimize damage, the SDF will establish a structure to conduct integrated operation of various equipment for missile defense and air defense equipment, thereby providing persistent nation-wide protection from peacetime and also enhancing the comprehensive air and missile defense capability that can simultaneously deal with multiple, complex airborne threats.
- As for Aegis Ashore, its deployment process was suspended in June 2020. In December 2020, in order to respond to the increasingly severe security environment surrounding Japan more flexibly and effectively, a Cabinet decision was made to procure two Aegis system-equipped vessels.

Responses in the Domains of Space, Cyberspace and Electromagnetic Spectrum

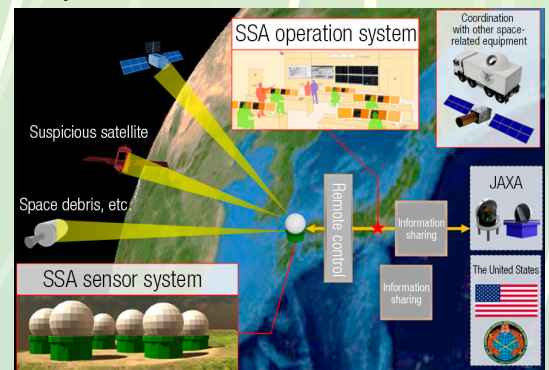
Responses in Space Domain

- In preparation for full-scale operations of the SSA system scheduled in FY2023, the MOD is working to deploy a radar and its operation system, which will monitor threats to Japanese satellites such as space debris.
- The Space Operations Group (tentative name) will be established to reinforce the unit that specializes in space domain missions.

Response in Cyber Domain

- The MOD/SDF has taken comprehensive measures such as ensuring the safety of information systems, and dealing with cyber attacks via specialized units.
- The MOD/SDF has held a cyber competition to identify highly skilled workforce with cybersecurity expertise and promoted the utilization of external human resources through, for example, initiatives to recruit a Chief Cyber Security Advisor with advanced knowledge.

SSA system



The JSDF Cyber Defense Command (tentative name) to be established in FY2021



Three Pillars of Japan's Defense (Means to Achieve the Objectives of Defense)

Response in Electromagnetic Domain

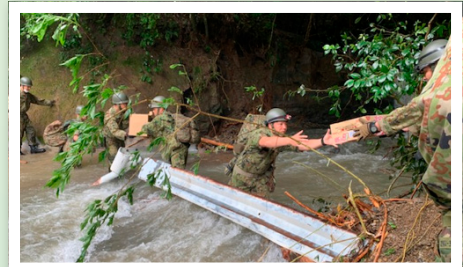
- The MOD/SDF will: enhance its ability to appropriately manage and coordinate the use of electromagnetic spectrum; strengthen information collection and analysis capabilities related to electromagnetic spectrum, and develop an information sharing posture; and strengthen capabilities to neutralize the radar and communications of opponents who intend to invade Japan.
- The SDF pushed forward the establishment of the GSDF Electronic Warfare Unit, the development of stand-off electronic warfare aircraft, and research on a high-power microwave system (HPM) and a high-energy laser system (HEL).

Response to Large-Scale Disasters (Including Response to COVID-19)

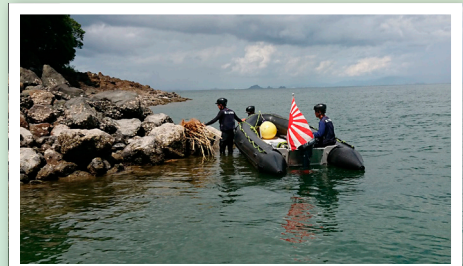
Response to Large-Scale Disasters (Including Response to COVID-19)

- The SDF, working in collaboration with local governments, engages in various activities such as search and rescue for disaster victims, ships, and aircraft in distress, as well as preventing epidemics.
- At the beginning of a disaster, the SDF maintains response readiness to any damage and need for activities while giving the first priority to life-saving activities. For livelihood support, the SDF will coordinate the division of roles, response policy, activity period, and other matters with relevant parties including the local governments and ministries concerned at the local response headquarters, etc.
- In FY2020, the SDF conducted 531 cases of disaster relief including for the Heavy Rain Event of July 2020 and Typhoon No. 10 (Haishen) of 2020.
- In order to prevent the spread of COVID-19, which has resulted in a global pandemic and become a serious security threat to the international community including Japan, the MOD/SDF carried out various activities including disaster relief operations in 35 prefectures by combining its strength.
 - The MOD/SDF conducted capacity building on infection protection for approximately 2,400 employees of local governments in 33 prefectures.*
 - Approximately 760 SDF personnel gave emergency assistance for patients in temporary accommodations in eight prefectures.
 - Approximately 90 SDF personnel conducted transfers of COVID-19 patients from hospitals to temporary accommodations in six prefectures.
 - The SDF conducted medical assistance in five prefectures.
 - The SDF set up a tent and implemented necessary maintenance for outdoor PCR tests in one prefecture.
 - Approximately 80 SDF personnel conducted transfers of patients on remote islands in five prefectures.
 - The SDF dispatched its own CT diagnosis vehicle in one prefecture.
- The SDF conducted disaster relief for avian influenza, Classical Swine Fever (CSF), forest fires, and heavy snowfall.

*The figures include the number of capacity building conducted by general orders and through intergovernmental cooperation.



GSDF personnel transporting relief supplies to isolated communities at the time of the Heavy Rain Event of July 2020 (July 2020)



MSDF personnel engaging in activities to save lives at the time of the Heavy Rain Event of July 2020 (July 2020)



GSDF personnel conducted capacity building for quarantine measures at Tokyo International Airport (April 2020)

SDF Activities since the Enforcement of the Legislation for Peace and Security

Asset protection of the units of the armed forces of the United States and other countries (Article 95-2 of the Self-Defense Forces Law)

- In 2020, the SDF conducted asset protection for U.S. military vessels and aircraft 25 times in total.

Chapter 2

Japan-U.S. Alliance

Significance of the Japan-U.S. Security Arrangements

- The Japan-U.S. Security Arrangements based on the Japan-U.S. Security Treaty, which marked the 60th anniversary in 2020, together with Japan's own national defense architecture, constitute a cornerstone for Japan's national security.
- The Japan-U.S. Alliance, with the Japan-U.S. Security Arrangements as its core, plays a significant role for peace, stability and prosperity of not only Japan but also the Indo-Pacific region and the international community.

Outline of the Guidelines for Japan-U.S. Defense Cooperation

- The Guidelines, which provide the general framework and policy direction for the roles and cooperation of Japan and the United States, were formulated in 1978 and revised in 1997 and 2015.
- The current Guidelines, revised in 2015, set forth cooperation in all phases, from peacetime to contingencies, as well as cooperation in space and cyber domains, and manifest a strategic vision for a more robust Alliance and greater shared responsibilities.

Policy Consultations between Japan and the United States



Japan-U.S. Security Consultative Committee ("2+2") Meeting (March 2021)



Japan-U.S. Defense Ministerial Meeting (March 2021)

- In March 2021, Minister for Foreign Affairs Mr. MOTEGI Toshimitsu, Minister of Defense Mr. KISHI Nobuo, U.S. Secretary of State Antony Blinken, and U.S. Secretary of Defense Lloyd Austin held the Japan-U.S. Security Consultative Committee ("2+2") Meeting in Tokyo. Also, on the same day, Minister Kishi and Secretary Austin held the Japan-U.S. Defense Ministerial Meeting. Through these opportunities, the two countries agreed to further deepen their cooperation in strengthening the Alliance capabilities to deter and respond, and also reaffirmed and expressed the following key points.
 - The Ministers acknowledged that China's behavior, where inconsistent with the existing international order, presents challenges to the Alliance and to the international community;
 - The Ministers opposed any unilateral action that seeks to change the status quo, including in the East China Sea and the South China Sea, and expressed serious concerns about China's Coast Guard law;
 - The Ministers affirmed the importance of strengthening cooperation with various partners in the region and beyond to maintain and strengthen a "Free and Open Indo-Pacific";
 - The Ministers agreed on the importance of strengthening their readiness through various advanced exercises, including Japan-U.S. bilateral training.

Three Pillars of Japan's Defense (Means to Achieve the Objectives of Defense)

Strengthening Ability of Japan-U.S. Alliance to Deter and Counter Threats

- In order to ensure Japan's peace and security, Japan and the United States are advancing cooperation in various fields, including "Cooperation in Space and Cyber Domains and Others," "Comprehensive Air and Missile Defense," "Bilateral Training and Exercises," "Intelligence, Surveillance and Reconnaissance (ISR) Activities," "Maritime Security," "Logistics Support," and "Cooperation in Response to a Large-Scale Disaster in Japan."



SDF and U.S. Forces personnel taking part in a Japan-U.S. bilateral exercise



ASDF F-15 fighters and U.S. Air Force B-1 bombers conducting Japan-U.S. bilateral exercises

Strengthening and Expanding Cooperation in a Wide Range of Areas

- In order to create a desirable security environment including maintaining and enhancing the free and open maritime order, and with an eye on increasing the Japanese and U.S. presence in the Indo-Pacific region, Japan and the United States are conducting bilateral activities in such areas as "Maintaining and Strengthening the Maritime Order" and "Humanitarian Assistance/Disaster Relief," and strengthening and expanding cooperation in the areas of "Defense Equipment and Technology Cooperation" and "Joint/Shared Use."

Steady Implementation of Measures Concerning the Stationing of the USFJ

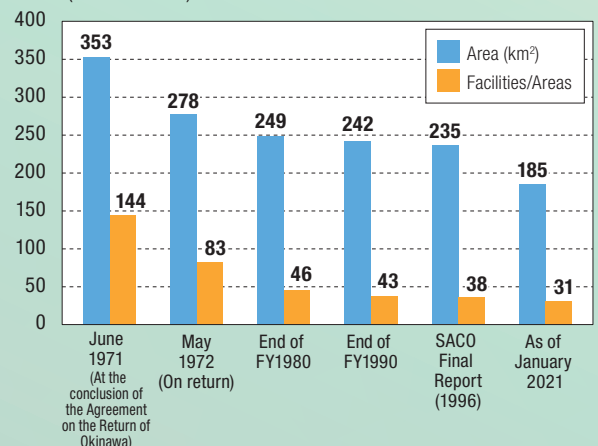
Stationing of the USFJ

- It is necessary to maintain the presence of the USFJ and its readiness to make rapid and agile responses in case of emergency in Japan and its surrounding areas even in peacetime, so that the Japan-U.S. Alliance can sufficiently function as deterrence contributing to the defense of Japan and regional peace and stability.
- Therefore, Japan accepts the stationing of the U.S. Forces based on the Japan-U.S. Security Treaty and it is a cornerstone of Japan-U.S. Security Arrangements.

Stationing of the U.S. Forces in Okinawa

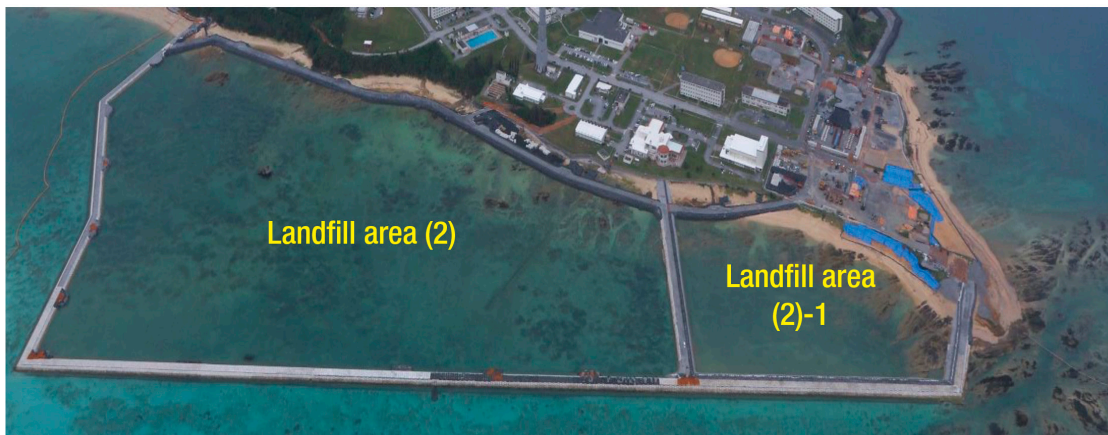
- The stationing of the U.S. forces, including the U.S. Marine Corps, capable of dealing with a wide range of missions with high mobility and readiness, in Okinawa, a strategic location, further ensures the effectiveness of the Japan-U.S. Alliance, strengthens deterrence, and contributes greatly not only to the security of Japan but also to the peace and stability of the Indo-Pacific region.
- On the other hand, approximately 70% of USFJ facilities and areas (for exclusive use) are concentrated in Okinawa Prefecture, occupying approximately 8% of the land area of the prefecture and approximately 14% of the main island of Okinawa. Therefore, it is necessary to make utmost efforts to mitigate the impact on Okinawa, while also considering the above-mentioned security standpoints.

Changes in Number and Area of the USFJ Facilities and Areas (Exclusive Use) in Okinawa



- The relocation of MCAS Futenma holds more significance than merely moving the facility from one location to another. It serves to reduce the functions and area of the bases in Okinawa, and contributes greatly to mitigating the impact on the prefecture.
- For the construction of the Futenma Replacement Facility, landfill construction is in progress in the waters south of Camp Schwab of the U.S. Forces. In April 2020, the Okinawa Defense Bureau submitted to the Governor of Okinawa Prefecture the Landfill Permit Revision Request given the additional implementation of the soil improvement work, etc., based on the Act on Reclamation of Publicly-owned Water Surface.

November 2018



May 2021



The progress of landfill construction in the waters south of Camp Schwab

- The following progress has been made involving the return of USFJ land:
 - March 2015: West Futenma Housing Area within Camp Zukeran (Camp Foster) (approximately 51 ha) was returned.
 - December 2016: A major portion of the Northern Training Area (approximately 4,000 ha) was returned. This is the largest of its kind since the reversion of Okinawa to the mainland.
 - July 2017: A portion of MCAS Futenma (approximately 4 ha of land along Ginowan City road 11) was returned.
 - March 2018: A portion of Makiminato Service Area (Camp Kinser) (approximately 3 ha of land for the widening of Route 58) was returned.
 - March 2019: A portion of Makiminato Service Area (Camp Kinser) (approximately 2 ha of land near Gate 5) was returned.
 - March 2020: Portions of land at Camp Zukeran (Warehouse Area of Facilities and Engineering Compound) (approximately 11 ha) were returned.
 - December 2020: A portion of MCAS Futenma (approximately 0.1 ha of land near Samashita Gate) was returned.

Stationing of the U.S. Forces in Regions Other than Okinawa

- In regions other than Okinawa, the MOD is implementing measures to secure the stable stationing of the U.S. Forces by maintaining its deterrence while trying to mitigate the impact on local communities. It has continued to work on the realignment of the USFJ and its facilities and areas.

Strategic Promotion of Multi-Faceted and Multi-Layered Defense Cooperation

Efforts under the Vision of a "Free and Open Indo-Pacific"

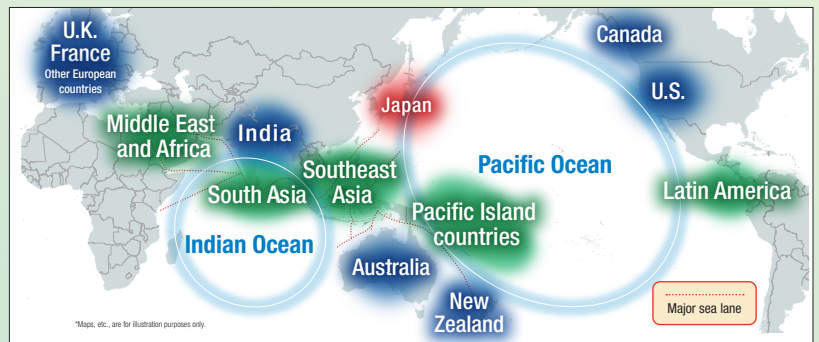
- In line with the vision of a "Free and Open Indo-Pacific," the MOD/SDF will create a desirable security environment for Japan by strategically promoting multi-faceted and multi-layered security cooperation, strengthening bilateral/multilateral defense cooperation and exchanges with the countries in the Indo-Pacific region.

Three pillars of the vision

- (i) Promotion and establishment of the rule of law, freedom of navigation and free trade
- (ii) Pursuit of economic prosperity (improving connectivity, etc.)
- (iii) Commitment to peace and stability

MOD's Approach to the Initiatives

- Securing the stable use of major sea lanes by way of defense cooperation and exchange activities
- Preventing contingencies through confidence building and mutual understanding
- Contributing to peace and stability through active engagement in the region, in cooperation with partner countries



Promotion of Defense Cooperation and Exchanges

- The MOD/SDF promotes bilateral defense cooperation and exchanges using the optimal combination of various cooperative means, while taking into account matters such as regional situations, the situations of each country and their relationships with Japan.
- The MOD has shared serious concern about the situations in the East and South China Seas with these countries, issuing clear messages to strongly oppose unilateral attempts to change the status quo by coercion and to create faits accomplis.
- **Australia:** The MOD further enhanced various cooperation as "Special Strategic Partners" through events such as a face-to-face Defense Ministerial Meeting (October 2020) held for the first time since the outbreak of COVID-19.
- **India:** The MOD promoted cooperation in a wide range of fields including the signing of the Acquisition and Cross-Servicing Agreement (ACSA) in September 2020 and Japan-U.S.-India-Australia Multilateral Exercise in November 2020. The MOD also pursues quadrilateral cooperation among Japan, the United States, Australia, and India.
- **ASEAN member states:** In addition to high-level bilateral dialogues and consultations, the MOD has promoted more substantial cooperation such as capacity building programs, multilateral exercises, and defense equipment and technology cooperation, while also strengthening cooperation under multilateral frameworks.
- **ROK:** In light of the continued negative response by the ROK defense authorities, the MOD continues to strongly request proper responses from the ROK side so as not to damage Japan-ROK bilateral relations and Japan-ROK-U.S. trilateral relations.
- **European countries, Canada, and New Zealand:** The MOD advanced defense cooperation and exchanges with a focus on initiatives that address common global security issues such as responses to illicit ship-to-ship transfers.
- **China:** The MOD has conveyed Japan's strong concerns over China's activities in the East and South China Seas, and the recent Coast Guard Law of China. The MOD/SDF has also promoted mutual understanding and confidence building between the defense authorities of the two countries by holding multi-layered dialogues and exchanges, and coordinating the early establishment of a hotline.
- **Pacific Island Countries:** MOD works in close cooperation with Pacific Island countries in preparation for the Japan Pacific Islands Defense Dialogue, which will be the first multilateral defense ministerial meeting hosted by Japan.
- **Middle Eastern Countries:** MOD/SDF promotes the holding of online high-level bilateral dialogues and consultations.



Japan-Australia Defense Ministerial Meeting conducted face-to-face (October 2020)



Japan-U.S.-India-Australia Multilateral Exercise "Malabar 2020" (November 2020)



Minister of Defense Kishi holding a video teleconference with the Chinese State Councilor, who also serves as the Chinese Minister of National Defense (December 2020)

Promotion of Multilateral Security Cooperation

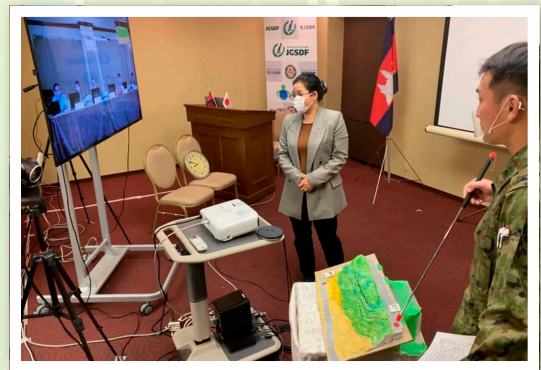
- Multilateral framework initiatives, such as the ASEAN Defence Ministers' Meeting (ADMM)-Plus and the ASEAN Regional Forum (ARF) have made steady progress and served as an important foundation for dialogue and cooperation and exchanges on the security of Asia-Pacific.
- Based on Vientiane Vision 2.0, a guideline for future ASEAN-Japan defense cooperation, Japan has, in addition to bilateral cooperation, strengthened cooperation under multilateral frameworks, and announced the launch of the "Japan-ASEAN Cyber Security Training Program for Defense Authorities."
- Moreover, Japan has proactively participated in international conferences hosted by private and other organizations, as well as service-to-service exchange initiatives such as multilateral conferences and exercises.



Minister of Defense Kishi participating in the 7th ASEAN Defence Ministers' Meeting-Plus (ADMM-Plus) (online meeting; December 2020)

Proactive and Strategic Initiatives for Capacity Building

- Since 2012, the MOD/SDF has provided capacity building in such areas as HA/DR, peacekeeping operations (PKO), and maritime security to 15 countries and one organization in the Indo-Pacific and other regions.
- Taking into account the impact of the COVID-19 pandemic, the MOD/SDF has been incorporating online lectures and training as new methods to be used in capacity building programs since 2021.
- Between January 2020 and March 2021, the number of capacity building programs conducted by means of dispatch was seven (four countries, 33 officials), and the number of those conducted by means of invitation was four (three countries, one organization and 57 trainees). The number of online lectures and practices was two with two countries.



GSDF personnel providing online lectures on road surveying to the Royal Cambodian Armed Forces (February 2021)

Ensuring Maritime Security

- For Japan, a maritime nation, strengthening the order based on fundamental norms, such as the rule of law and the freedom of navigation, as well as ensuring safe maritime transport, is the foundation for its peace and prosperity, which is extremely important.
- The SDF has been dispatching the Deployment Surface Force for Counter Piracy Enforcement, the Deployment Air Force for Counter Piracy Enforcement, and the Deployment Support Group for Counter Piracy Enforcement since 2009 in order to protect vessels from acts of piracy in the waters off the coast of Somalia and in the Gulf of Aden.
- In addition to strengthening cooperation with coastal states of the Indo-Pacific region through bilateral/multilateral training and port calls, the MOD has been implementing capacity building in maritime security, and working on cooperation for maritime security within regional security dialogue frameworks such as the ADMM-Plus.



Destroyer JS "Onami" engaging in a counter-piracy operation in the Gulf of Aden (June 2020)

Cooperation in Use of Space and Cyber Domains

- Regarding cooperation in use of space domain, the MOD/SDF has promoted cooperation in various fields including multilateral sharing of views on threat awareness in outer space through participating in consultations with relevant countries and the Schriever Wargame, a multinational tabletop exercise on space security.
- Regarding cooperation in use of cyber domain, the MOD has held cyber dialogues with the respective defense authorities of the United States, the United Kingdom, Australia, and others, to share threat perceptions and exchange views on response to cyber attacks. In addition, the MOD is strengthening cooperation with related countries by officially participating for the first time in "Locked Shields 2021," a cyber defense exercise organized by the NATO's Cooperative Cyber Defence Centre of Excellence (CCDCOE).

Initiatives for Arms Control, Disarmament and Non-Proliferation

- Japan actively participates in international initiatives for arms control, disarmament, and non-proliferation pertaining to the proliferation of WMDs, missiles that can deliver them, and the proliferation of not only conventional arms but also goods and sensitive technologies of potential military use. In addition, Japan has also been proactively involved in international discussions related to Lethal Autonomous Weapons Systems (LAWS) in recent years.

Efforts to Support International Peace Cooperation Activities

- The MOD/SDF has been proactively undertaking international peace cooperation activities working in tandem with diplomatic initiatives, including the use of ODA for resolving the fundamental causes of conflicts, terrorism and other problems.
- For the SDF to be a proactive contributor to international peace cooperation activities, all three branches of the SDF, namely the GSDF, MSDF and ASDF, designate dispatch stand-by-units, and ensure that the designated units are always ready to be deployed. In addition, the SDF works on a daily basis to be fully prepared for any future operations such as enhancing information-gathering abilities at dispatch destinations, providing training for SDF personnel to be dispatched to international peace cooperation activities, and supporting their training.

Dispatch to the Multinational Force and Observers (MFO)

- In 2019, the Government of Japan decided to dispatch staff officers, and later two staff officers were dispatched to the MFO headquarters as the first “Internationally Coordinated Operations for Peace and Security.”
- The dispatched officers engage in liaison and coordination between Egypt, Israel, and the MFO as a Deputy Chief of Liaison and an Assistant Liaison Operation Officer at the MFO headquarters, which is located in the south camp at Sharm El-Sheikh in the southern part of the Sinai Peninsula.



GSDF personnel serving at the MFO headquarters (June 2020)

The United Nations Mission in the Republic of South Sudan (UNMISS)

- The peace and stability of South Sudan is not only essential for the country itself but also for peace and stability in Africa as a whole; it is a crucial issue that should be dealt with by the international community.
- The MOD/SDF currently dispatches four GSDF officers (logistics, intelligence, engineering, and aviation operations officers) to the UNMISS headquarters, thereby contributing to the activities of UNMISS.



GSDF personnel serving at the UNMISS headquarters (November 2020)

Support to the UN Triangular Partnership Project (UNTPP)

- The UNTPP was founded using funds from Japan as a project to support the trainings of prospective PKO personnel by the UN Department of Operational Support. Since 2015, Japan has dispatched a total of 164 GSDF personnel to Africa to provide nine training sessions on the operation of heavy equipment for a total of 277 personnel from eight African countries.
- Considering that 30% or more of PKO personnel are from Asia, Japan has dispatched a total of 66 GSDF personnel to Vietnam and implemented three training sessions on the operation of heavy equipment for 56 personnel in nine countries within Asia and the surrounding regions since 2018.
- Japan dispatched two GSDF personnel (doctors) as instructors to the first United Nations Field Medical Assistant Course (UNFMAC), held in Uganda in 2019.

International Disaster Relief Activities

- To contribute to the advancement of international cooperation, the SDF has engaged in international disaster relief activities proactively from the viewpoint of humanitarian contributions and improvement of the global security environment.

Enhancement of Human Resource Base and Medical Functions

Reinforcing Human Resource Base

- The NDPG specifies that the core element of defense capability is SDF personnel, and that securing human resources for SDF personnel and improving their ability and morale are essential to strengthening defense capability. This has become an imminent challenge in the face of a shrinking and aging population with the declining birth rate. Also, in light of the sustainability and resilience of defense capability, the SDF has been working even further to reinforce the human resource base.

Recruitment and Employment

- In order to recruit capable human resources with a strong determination to join the SDF, the MOD/SDF maintains Provincial Cooperation Offices in 50 locations throughout Japan to attentively and perseveringly conduct recruitment and employment of SDF personnel obtaining cooperation from local governments and schools and support from recruitment counselors.

Efforts including Effective Use of Human Resources

- With regard to the personnel structure of the SDF, the full number of SDF personnel has been reduced. At the same time, in order to handle increasingly sophisticated defense equipment and the diversification and internationalization of SDF missions, for the purpose of further utilizing older human resources who have plenty of knowledge, skills and experience, the MOD/SDF has gradually raised the retirement age of each rank and is promoting the expansion of re-enrolment and the utilization of the skills of retired SDF personnel.
- In addition, the SDF promotes automation and manpower saving that leverage technological innovations such as artificial intelligence. Furthermore, in order to ensure an adequate operation ratio with a limited number of personnel, some MSDF vessels have introduced a system of rotating shift duty among multiple teams of crews. This reduces the overall number of offshore duty days per crew, thereby improving the living and working conditions.

Improvement of Living and Work Environment and Treatment

- To ensure readiness, the SDF has accelerated its acquisition and renewal of the necessary barracks and housing, and also promoted measures for deteriorated and earthquake-resistant facilities; additionally, it has steadily renewed worn-out, living-related and work equipment, and secured the requisite amount of daily consumables.
- In order to ensure appropriate treatment in accordance with the special nature of their missions including associated risks and the characteristics of the area where the office is located, the SDF is working to make improvements to special work allowance, etc., procure portable beds and better emergency rations to improve their ability to respond to disasters, and implement measures concerning honors and privileges, including the enhancement of defensive meritorious badges.

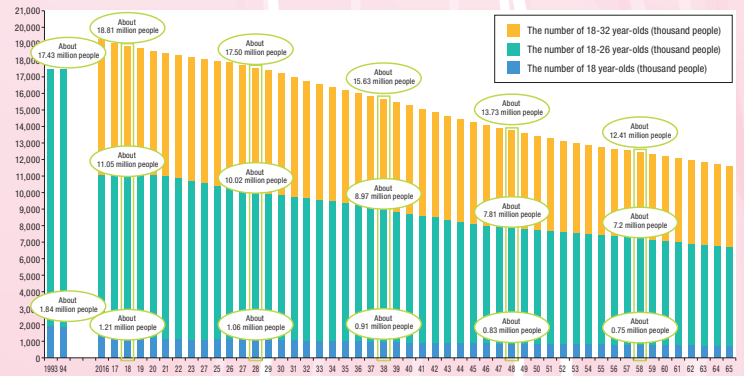
Initiatives to Maintain Rigorous Discipline

- In order to eradicate disciplinary violations such as assault, injury and workplace harassment, the MOD/SDF has tightened the standards of disciplinary punishment, and taken a zero-tolerance approach. In addition to implementing various measures to improve and reinforce consultation systems, including providing various forms of education on the topic for SDF personnel, and establishing a permanent "MOD workplace harassment hotline" and a consultation service provided by alliance lawyers.

Initiatives to Prevent Suicide among SDF Personnel

- In order to prevent suicide, the MOD/SDF pays full attention if SDF personnel have any trouble at work and/or home by conducting an active interview, and takes positive measures to advise those with symptoms of mental illness to go for outside counselling, and/or to get a medical consultation at medical institutions.

Changes in the Number of People Eligible to Join the SDF



Material sources: The numbers for FY1993 and FY1994 are based on "Population Estimates of Japan 1920 - 2000" and "Current Population Estimates," Statistics Bureau, Ministry of Internal Affairs and Communications. Data from FY2016 onward are based on "Population Projection for Japan" (medium estimates in April 2017), National Institute of Population and Social Security Research.



Online recruitment session for high school students



SDF personnel receiving harassment prevention education

Working Style Reform for the Promotion of Work-Life Balance

Further Promotion of Work-Life Balance and Women's Participation

- The MOD/SDF is making efforts to promote correcting long working hours, introducing more flexible working hours and workplaces, and taking leave to ensure proper work-life balance so that every member can exert his/her full potential.
- In particular, in March 2021, the MOD revised the “Action Plan for Promoting the Active Participation of Female Employees and Work-Life Balance at the MOD” and is aiming to expand and enhance initiatives under the new action plan by incorporating thorough management of work hours and management reforms for improving administrative staff’s management ability.

Reform to Promote Women's Participation

- In terms of employing and promoting female SDF personnel, the MOD/SDF sets out a personnel management policy to ensure equal opportunity between men and women and assign the right person to the right place based on the person’s motivation and ability/aptitude.
- The MOD/SDF has been reviewing the restriction of assignment of female personnel. With first female personnel assigned to be a submarine crew member in October 2020, the restriction against females was completely removed with the exception of the units where female personnel cannot be assigned for reasons of maternity protection (a part of the GSDF Nuclear Biological Chemical (NBC) Weapon Defense Unit [chemical] and Tunnel Company Units).



The annual “Competition for Initiatives to Promote Working Style Reform at the Ministry of Defense,” which honors initiatives conducted by each organization in the MOD/SDF that promoted business efficiency



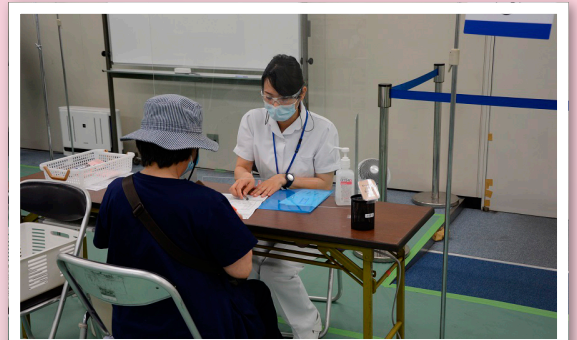
First female submarine crew member (October 2020)

Enhancement of Medical Functions

- For the SDF to perform its mission, the SDF makes continuous efforts to appropriately manage the health of its personnel and ensure they remain in good health, as well as to enhance and strengthen its capabilities in military medicine for maximally protecting the lives of the personnel who engage in a variety of services.
- Under the circumstances where the SDF’s missions are becoming more diverse and internationalized, the SDF aims to appropriately and accurately carry out various medical activities, such as medical support in disaster relief and international peacekeeping activities, and capacity building in the medical field.
- As part of the MOD/SDF’s response to the COVID-19 outbreak, the SDF hospitals and the National Defense Medical College Hospital (NDMCH) have been accepting COVID-19 patients since February 2020. As of March 31, 2021, the SDF Central Hospital, the SDF hospitals in Sapporo, Misawa, Sendai, Yokosuka, Fuji, Hanshin, Fukuoka, Sasebo, Kumamoto, Beppu, and Naha, as well as the NDMCH accepted a total of 1,708 COVID-19 patients.
- In particular, the SDF Central Hospital and the NDMCH have been designated as Medical Institutions for Type I Infectious Diseases, and have expanded their capacity to accept COVID-19 patients by including beds for general patients in response to the increase in patient numbers.
- In addition, in order to accelerate vaccination against COVID-19, the SDF opened up their large-scale vaccination centers in Tokyo and Osaka, on May 24, 2021, and is currently conducting vaccinations.



Medical and nursing officers engaging in the treatment of COVID-19 patients



Operations at an SDF large-scale vaccination center

Chapter 2

Measures on Defense Equipment and Technology

Reinforcing Technology Base

- Review of the Medium- to Long-Term Defense Technology Outlook is now underway in order to ensure Japan's technological superiority in the strategically important equipment and technology field, including technologies pertaining to new domains and other potentially game-changing important technologies.
- In FY2021, the MOD established the Future Capabilities Development Center at the Acquisition, Technology & Logistics Agency in order to reinforce the research and development system for advanced technology. In addition, the Director for Advanced Technology Strategy, who engages in planning for research and analysis of advanced technology trends in Japan and overseas, and the Technology Collaboration Support Division, which promotes the application of technical outcomes from advanced research conducted by universities, private companies, and national research institutes, have been established.

Optimizing Equipment Procurement

- As of the end of March 2021, the MOD has been promoting effective and efficient equipment acquisition by selecting 21 items for major programs designated for project management. At the same time, the MOD strives to cut equipment procurement costs by making bulk orders utilizing long-term contracts.
- To enhance the level of performance management, the MOD makes every effort. The specific efforts include constant monitoring of goods and service deliveries from both sides, facilitating the internal management system concerning the execution process of FMS procurement, and strengthening cooperation with the U.S. government through close Japan-U.S. consultations.

Strengthening Defense Industrial Base

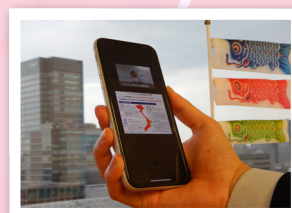
- In order to strengthen Japan's defense industrial base, the MOD identifies four lines of effort: (1) reforming the existing contract system towards creating a competitive environment among defense companies; (2) strengthening the risk management of the defense equipment supply chain; (3) further participation of Japan's defense industry in sustainment and maintenance of imported equipment, etc.; and (4) promoting appropriate overseas transfer of defense equipment under the Three Principles on Transfer of Defense Equipment and Technology.



Minister of Defense Kishi receiving reports on the outcome of opinion exchanges between the Acquisition, Technology & Logistics Agency and the Keidanren (Japan Business Federation) Committee on Defense Industry (December 2020)

Defense Equipment and Technology Cooperation

- Based on the Three Principles on Transfer of Defense Equipment and Technology, Japan promotes cooperation in defense equipment and technology with other countries in order to contribute to the maintenance and strengthening of defense technological and industrial bases, as well as contributing to the promotion of our national security, peace and international cooperation.
 - In August 2020, the contract between the Department of National Defense, the Republic of the Philippines and Mitsubishi Electric Corporation (MELCO) was concluded to supply four MELCO manufactured air surveillance radar systems with a total value of approximately one hundred million U.S. dollars (USD 100,000,000). This is the first overseas transfer case of a complete defense equipment system newly manufactured by a Japanese company since the formulation of the Three Principles on Transfer of Defense Equipment and Technology in 2014.
 - As opportunities to improve public and private knowledge on the overseas transfer of defense equipment, the MOD has held webinars one after another on precedents in the private business sector and the current status of defense equipment and technology cooperation. (So far, this webinar has been held for India in December 2020 and Vietnam in March 2021.)
 - In cooperation with trading companies, and manufacturing companies, the MOD has conducted Feasibility Studies to grasp the potential needs of target countries and carry out activities for proposals since fiscal year 2020 (conducted for India, Indonesia, Vietnam and Malaysia).



Vietnam webinar on the overseas transfer of defense equipment



The Philippine Air Force visiting the SDF radar systems

Enhancing Intelligence Capabilities

- For formulating defense policy accurately in response to the changes in the situation and for operating defense capabilities effectively in dealing with various situations, it is necessary to grasp medium- to long-term military trends in the neighboring countries of Japan and to detect the indications of various situations promptly. To this end, the MOD/SDF is making efforts to collect information swiftly and accurately daily by using various methods.
- Examples of intelligence collection means used by the MOD/SDF include: (1) collecting, processing and analyzing military communications and signals emanating from electronic weapons in the air over Japan; (2) collecting, processing, and analyzing data from various imagery satellites (including Information Gathering Satellite); (3) surveillance activities by ships, aircraft and other assets; (4) collecting and organizing a variety of open source information; (5) information exchanges with defense organizations of other nations; and (6) intelligence collection conducted by defense attachés and other officials.
- The MOD is planning to newly dispatch one defense attaché to New Zealand and Spain respectively, and dispatch one additional attaché to Israel, in FY2021, to reinforce cooperation with the Oceania region and improve intelligence collection related to Europe and the Middle East.



Defense Attaché to Israel Colonel Hiramitsu (right end) participating in an online Politico-Military Dialogue (PM) [The Ministry of Defense of the State of Israel]

SDF Training and Exercises for Maintaining and Further Enhancing High-Level Skills

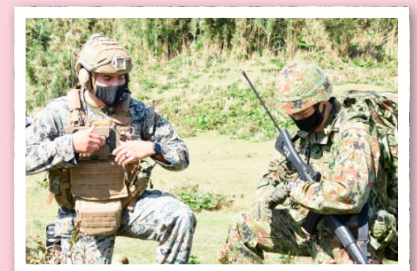
Training and Exercises by Each SDF Service

Training and Exercises

To fulfill its mission of defending Japan, the SDF needs to ensure that commanders and personnel possess high-level credentials and abilities even under normal circumstances, and that its units maintain high-level skills, so that the SDF can adopt a robust defense posture. This work will serve as deterrence to discourage other countries from having any intention to invade Japan. The SDF strengthens the Japan-U.S. Alliance capabilities to deter and respond by steadily implementing bilateral training and exercises. In addition, the SDF raises its presence from peacetime and demonstrates the intention and capabilities of Japan by actively conducting and joining multilateral training and exercises, based on the vision of the Free and Open Indo-Pacific (FOIP).

Major Bilateral/Multilateral Training and Exercises of SDF Service

- The SDF conducts various training and exercises such as the Japan-U.S. bilateral joint exercise “Keen Sword (field training exercise)” to enhance response capabilities for a range of contingencies and bolster the ability of the Japan-U.S. Alliance to deter and respond.
- The MOD/SDF actively carries out training and exercises with relevant countries such as the Japan-U.S.-India-Australia Multilateral Exercise “Malabar 2020” to contribute to upholding and reinforcing a “Free and Open Indo-Pacific.”



U.S. marine and GSDF personnel carry out training at a remote island as part of “Keen Sword (field training exercise)” (October 2020)

Development of an Environment for Various Training and Exercises

SDF training is planned and conducted under conditions as close as possible to actual combat situations. However, it is necessary to further expand and enhance the training environment to maintain and improve the readiness of the SDF. Against this background, the MOD promotes initiatives to expand and enhance the foundation for training both in Japan and abroad with the aim of conducting efficient and effective training and exercises.

Chapter 5

Initiatives on Coexistence with Regional Society and the Environment

Measures Concerning Harmony with Regional Society and the Environment

Supporting Civilian Life

The MOD/SDF conducts activities to support the lives of citizens in a range of fields, in response to requests from local governments and relevant organizations. Such activities contribute to further deepening the trust in the SDF, and provide SDF personnel with pride and confidence.



NAMIKI Tsukimi continuing to work hard, aiming for the Olympics

Support for the Japanese Antarctic Research Expedition

The MOD/SDF supports the scientific research project in the Antarctic conducted by the Ministry of Education, Culture, Sports, Science and Technology. The support for the 62nd Antarctic Research Expedition, which started in November 2020 and involved travelling approximately 30,000 km, has greatly contributed to the promotion of the Japanese Antarctic Research Expedition.



Support for the Antarctic Research Expedition

Addressing Environmental Issues

With the Government as a whole promoting concrete measures towards accelerating initiatives related to the Sustainable Development Goals (SDGs) and realizing a decarbonized society by 2050, the MOD, as part of the Government, also needs to contribute to solving environmental problems, while at the same time implementing measures with more focus on the coexistence of SDF/US Forces facilities and areas with surrounding areas.

Specifically, the MOD established the MOD Climate Change Task Force, which strongly promotes measures against global warming ministry-wide, in May 2021. In addition to which the MOD will reorganize the Bureau of Local Cooperation in FY2021 in order to develop the organization so as to be able to centrally and effectively respond to environmental issues.

Public Relations Activities, Public Records and Archives Management, Information Disclosure, and Related Activities

Various Public Relations Activities

- Providing Information Both Domestically and Internationally

The MOD/SDF conducts active PR activities through official websites, social media (Social Networking Services) and video distribution, utilizing the Internet.

The MOD has also been making efforts to provide accurate information in a more extensive and timely fashion, by creating brochures and PR videos, as well as providing assistance in editing the PR magazine "MAMOR" and cooperation on media coverage.



Air review (November 2020)

Initiatives for Public Document Management and Information Disclosure

The MOD/SDF is working on the management of public documents and proper response to requests for information disclosure by reforming the awareness of personnel and the organizational culture, enhancing the checking framework, and implementing other efforts, in order to realize proper management of public records and archives.

Part

I

Security Environment Surrounding Japan

Chapter 1

Overview

Chapter 2

Defense Policies of Countries

Chapter 3

Trends Concerning New Domains including Outer Space,
Cyberspace, and Electromagnetic Spectrum, and
Relevant Challenges Facing the International Community

1 Current Trends in Security Environment

What is notable about the current security environment is that, first of all, while interdependency among countries is further expanding and deepening, thanks to further growth of the national power of such countries as China, changes in the balance of power are accelerating and becoming more complex. In addition, uncertainty over the existing order is increasing. Against such a backdrop, prominently emerging is inter-state competition across the political, economic and military realms, in which states seek to shape global and regional order to their advantage as well as to increase their influence.

Such inter-state competition occurs on a continuous basis. In conducting inter-state competition, states leverage various means such as undermining another country's sovereignty using military and law-enforcement entities, and manipulating a foreign country's public opinion by exploiting social media. In such competition, "hybrid warfare" is sometimes adopted, forcing affected actors to take complex measures not limited to military ones. Also, so-called **gray-zone situations**, which are neither purely peacetime nor contingency situations, are becoming persistent over a long period of time, playing out as part of inter-state competition. They may possibly further increase and expand. Such gray-zone situations harbor the risk of rapidly developing into graver situations without showing clear indications.

Secondly, technological progress is about to change fundamentally how security should be managed. Against the backdrop of the advance of military technology due to rapid technological innovation in information &

communications and other fields, contemporary warfare increasingly features capabilities combined across all domains: not only land, sea and air but also new domains, which are space, cyberspace and electromagnetic spectrum. Aiming to improve overall military capability and acquire asymmetric military capability, states are seeking to gain superiority in technologies that undergird capabilities in new domains.

States endeavor to develop weapons that leverage cutting-edge, potentially game-changing technologies that could drastically change the conduct of future warfare, including artificial intelligence (AI), hypersonic, and high-power energy technologies.

Progress in military technology relies heavily on the development of civilian technologies. It is believed that the development and international transfer of civilian technologies will have a major impact on improvements in the military capabilities of each country. Further technological innovations hereafter are expected to make it difficult still to foresee future warfare.

Thirdly, security challenges, which cannot be dealt with by a single country alone, are prominently emerging.

First of all, securing the stable use of new domains such as space and cyberspace has become an important challenge for the security of the international community. In recent years, countries are moving ahead with a reinforcement of their comprehensive ability to combat cyber attacks. There are also moves seen in the international community to promote the rule of law in space and cyberspace, including an establishment of



Key Words "Gray-Zone Situations" and "Hybrid Warfare"

The so-called gray-zone situations simply represent a wide range of situations that are neither peacetime nor wartime.

In a gray-zone situation, for example, a country that confronts another over territory, sovereignty or maritime and other economic interests uses some forceful organization to demonstrate its presence in the relevant disputed region in a bid to alter the status quo or force other countries to accept its assertions or demands.

The so-called hybrid warfare represents methods to alter the status quo while intentionally blurring the boundaries between the military and non-military realms, forcing affected actors to take complex measures that are not limited to military actions.

The means of hybrid warfare include operations using military units of unidentified nationality, cyber attacks to affect communications and other critical infrastructure, the spread of false information through the internet and the media, and other influential operations. The combination of these measures is considered as amounting to hybrid warfare. In hybrid warfare, a country takes measures that are difficult to identify definitively as an "armed attack" based on its outward appearance. It is said that such an approach is taken with an intent to make it difficult for the target country to address the situation, such as delaying the military's initial response, while denying the attacker country's own involvement.

Amid emerging inter-state competition, hybrid warfare and other various measures tend to cause gray-zone situations to last for a long period of time.

certain norms of behavior.

In the maritime domain, there have been cases where a country unilaterally claims its entitlement and takes actions based on its own assertions that are incompatible with the existing international order, thereby unduly infringing upon the freedom of navigation in high seas and of overflight. In addition, piracy acts have taken place in various parts of the world.

The proliferation of weapons of mass destruction (WMDs), such as nuclear, biological, and chemical (NBC) weapons, and of ballistic missiles that serve as the means of delivery of WMDs, and international terrorism are still viewed as significant threats to the international community.

In response to the COVID-19 infection that emerged in China since the end of 2019, respective countries have been utilizing their military forces' sanitary capabilities, transportation capacity, and facilities, along with medical organizations, to deal with the infection domestically since the beginning of the outbreak. In the meantime, positive COVID-19 cases were identified within the military forces of those countries, leading to the situation in which military training or bilateral/multilateral exercises became suspended or postponed, and the infection has brought about diverse impacts and restrictions to military activities. Afterwards, as

the development of COVID-19 vaccines progresses, in the United States and other countries, there were cases in which military forces were mobilized to support operations related to COVID-19 vaccines.

Regarding the COVID-19 pandemic, it is pointed out that there have been moves of some countries intending to create international and regional orders more preferable to themselves and to expand their influence, such as spreading disinformation and other propaganda efforts in various manners and conducting so-called "vaccine diplomacy." For example, it has been pointed out that Russia and China's so-called "vaccine diplomacy," involving the continued active promotion of domestically developed vaccines around the world, is linked to disinformation and falsification activities aimed at damaging the trust placed in vaccines made by Europe, the U.S. and other countries.¹ Meanwhile, China is providing COVID-19 vaccines to the military forces of the surrounding countries, which is viewed as a conciliatory strategy to deal with the sense of vigilance against China's move related to the recent South China Sea. As these situations suggest, going forward, it is expected that strategic competition among countries will be further intensified over the responses to COVID-19 infections. We need to continue to closely watch such moves with great concern as security issues.

2 Regional Security Environment Surrounding Japan

Military powers with high quality and quantity are concentrated in Japan's surroundings, where clear trends such as further military buildup and an increase in military activities are observed.

States in the Indo-Pacific region, including Japan, abound in political, economic, ethnic, and religious diversity. Also, each country has different security views and threats perceptions. Therefore, a regional cooperation framework in the security realm has not been sufficiently institutionalized, and longstanding issues of territorial rights and reunification in this region continue to remain.

In the Korean Peninsula, the Korean people have been divided for more than half a century, and the faceoff continues between the military forces of the Republic

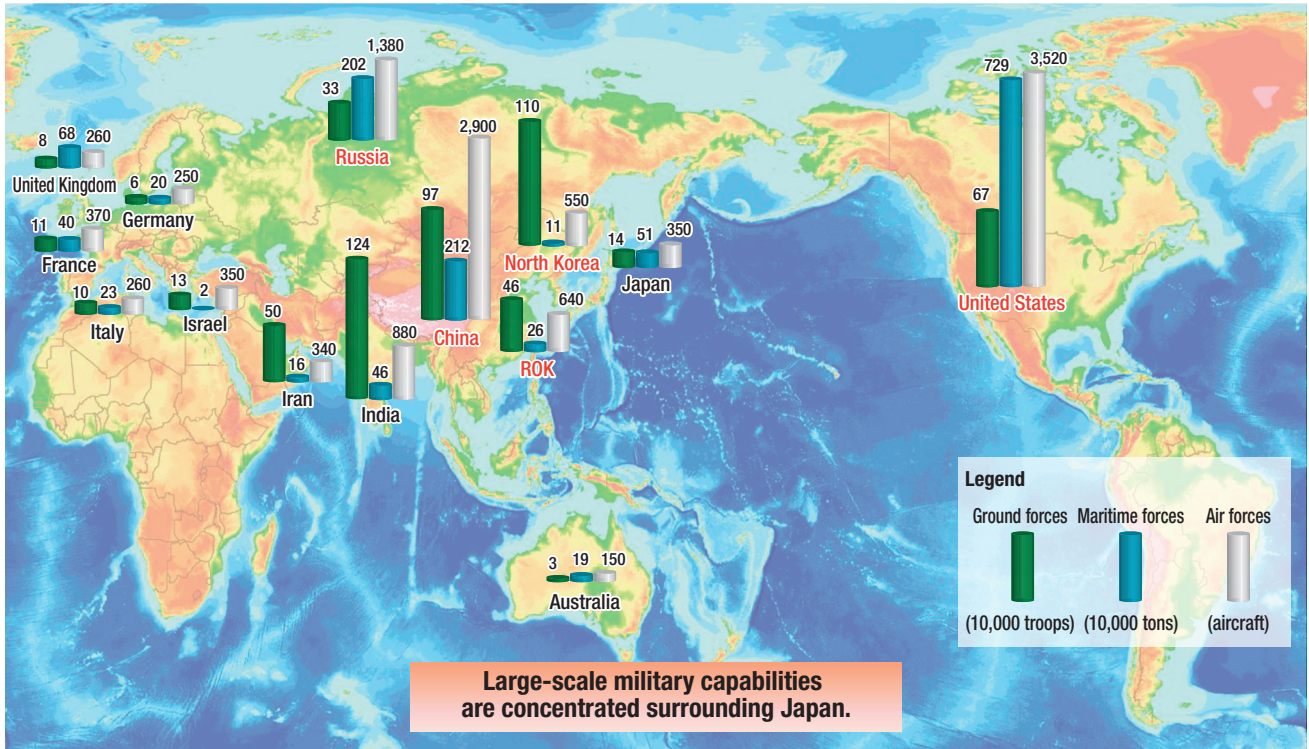
of Korea (ROK) and North Korea. Issues are existing concerning Taiwan and the South China Sea. Furthermore, with regard to Japan, territorial disputes over the Northern Territories and Takeshima, both of which are inherent parts of the territory of Japan, remain unresolved.

On top of this, recent years have seen a continued tendency towards the prolongation of so-called gray-zone situations, or situations that are neither pure peacetime situations nor contingencies and are associated with territories, sovereignty and economic interests, and such situations may increase and expand in the future. The gray-zone situations harbor the risk of rapidly developing into more serious situations without any clear forewarning.

¹ EEAS Special Report Update: Short Assessment of Narratives and Disinformation Around the COVID-19 Pandemic (Update December 2020 - April 2021), 28 April 2021

Fig. I-1-1 Regional Security Environment surrounding Japan etc.

Military Forces in Major Countries/Regions (Approximate Strength)



Military Forces in Major Countries/Regions

Ground forces (10,000 troops)		
1	India	124
2	North Korea	110
3	China	97
4	United States	67
5	Pakistan	56
6	Iran	50
7	ROK	46
8	Vietnam	41
9	Myanmar	38
10	Russia	33
—	Japan	14

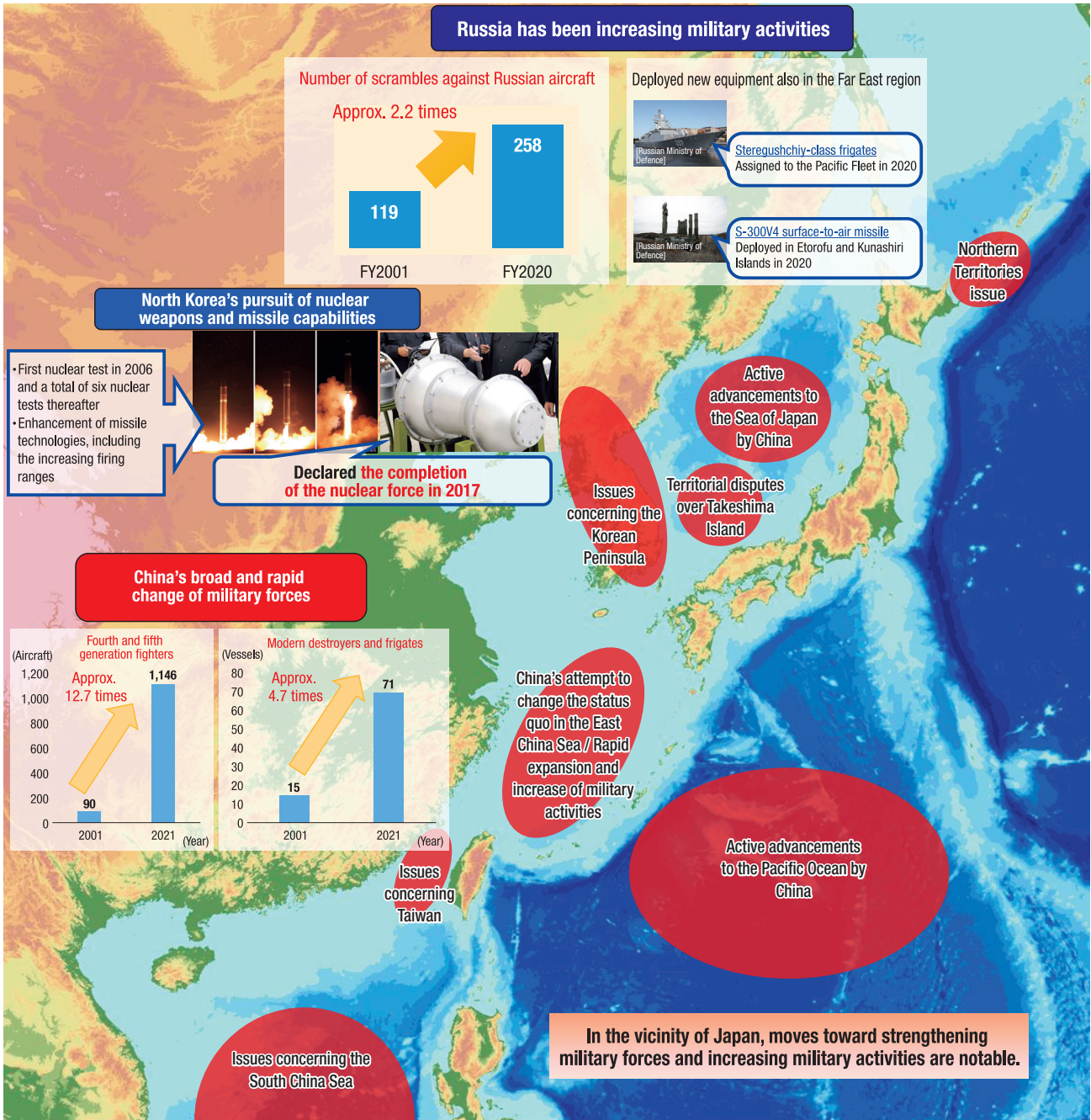
Maritime forces (10,000 tons (vessels))		
1	United States	729 (970)
2	China	212 (730)
3	Russia	202 (1,130)
4	United Kingdom	78 (140)
5	India	46 (300)
6	France	40 (310)
7	Indonesia	27 (170)
8	ROK	26 (230)
9	Italy	23 (180)
10	Turkey	22 (210)
—	Japan	51 (140)

Air forces (aircraft)		
1	United States	3,520
2	China	2,900
3	Russia	1,380
4	India	880
5	ROK	640
6	Egypt	600
7	North Korea	550
8	Taiwan	520
9	Saudi Arabia	450
10	Pakistan	440
—	Japan	350

(Notes)

- Figures for ground forces are basically the numbers of Army personnel in "The Military Balance 2021."** Figures for maritime forces show their tonnages compiled by the MOD based on "Jane's Fighting Ships 2020-2021." Figures for air forces are the total numbers of bombers, fighters, attack aircraft, surveillance aircraft, etc., compiled by the MOD based on "The Military Balance 2021."
- Figures for Japan indicate the strength of each SDF as of the end of FY2020; the number of combat aircraft (air forces) is the sum of ASDF aircraft (excluding transport aircraft) and MSDF aircraft (fixed-wing aircraft only).

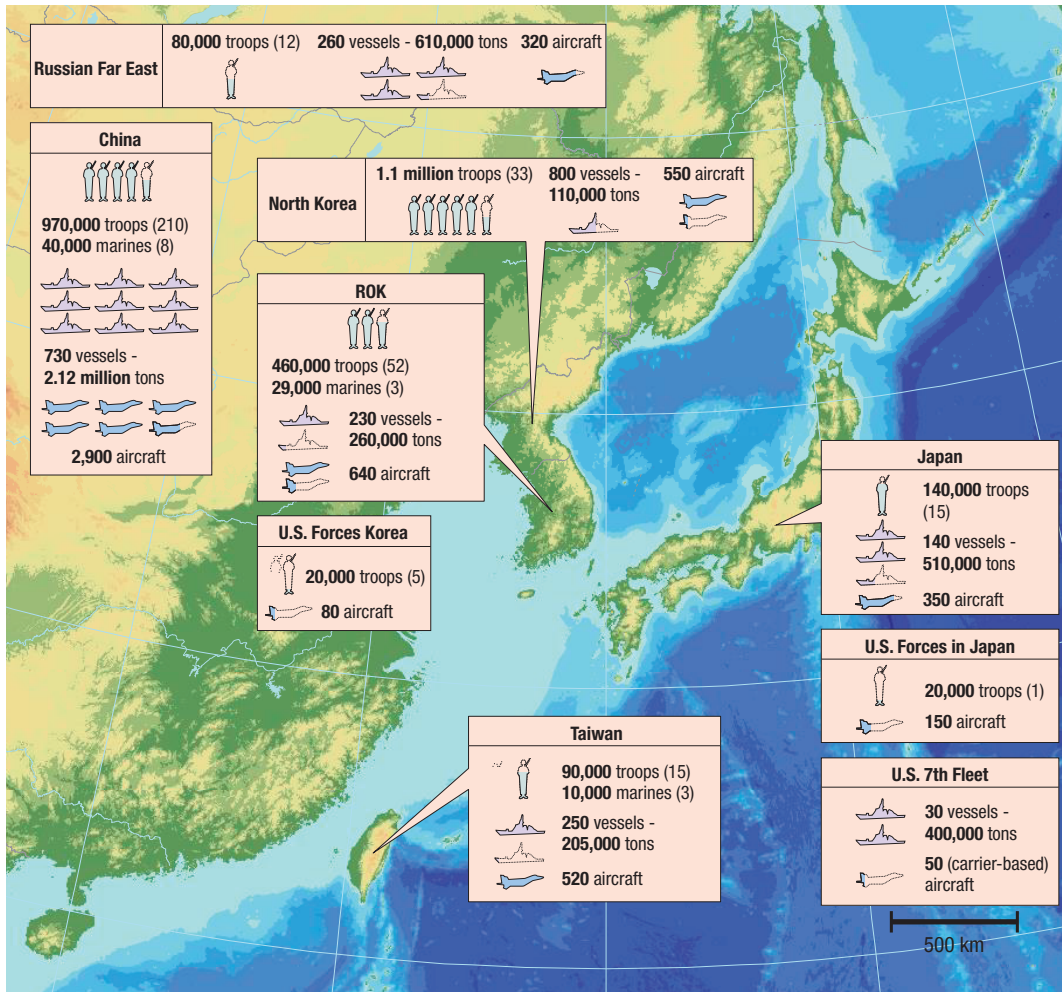
* Figures are rounded off to the nearest 10,000 personnel. Figures for the United States include 490,000 Army personnel and 180,000 Marines personnel. Figures for Russia include 50,000 airborne unit personnel in addition to 280,000 ground force personnel. Figures for Iran include 150,000 ground force personnel of the Islamic Revolutionary Guard Corps in addition to 350,000 Army personnel.



- Countries in this region abound in political, economic, ethnic, and religious diversity and views on security and the perceptions of threats are different by country.
 - A regional cooperation framework in the security realm has not been sufficiently institutionalized. (⇒ NATO's collective defense in Europe)
 - Longstanding issues of territorial rights and reunification in this region continue to remain. (e.g. Korean Peninsula, Taiwan, South China Sea)
- Inter-state competition across the political, economic and military realms is prominently emerging in recent years.
 - Gray-zone situations may increase and expand, which harbors the risk of developing into graver situations.

(Note) Figures for modern destroyers and frigates for China show the total number of Renhai-class, Luhai-class, Sovremenny-class, Luyang-class, and Luzhou-class destroyers and Jiangwei-class and Jiangkai-class frigates. Additionally, China has 50 Jiangdao-class corvettes (in 2021).

Fig. I-1-2-1 Main Military Forces in Japan's Surroundings (Approximate Strength)



- Notes:
1. Source: Documents published by the DoD, "The Military Balance 2021," etc.
 2. Figures for Japan indicate the strength of each SDF as of the end of FY2020; the number of combat aircraft is the sum of ASDF aircraft (excluding transport aircraft) and MSDF aircraft (fixed-wing aircraft only).
 3. Figures for the ground forces of U.S. Forces Japan/Korea indicate the combined total for Army troops and U.S. Marines.
 4. Figures for combat aircraft include naval and marine aircraft.
 5. Figures in parentheses indicate the total number of major units such as divisions and brigades. That for North Korea includes only divisions. That for Taiwan includes military police.
 6. The figures for the U.S. 7th Fleet indicate forces forward-deployed to Japan and Guam.
 7. The figures for the combat aircraft of U.S. Forces Japan and the U.S. 7th Fleet include only fighter aircraft.

Legend

	Ground forces		Vessels		Combat aircraft
	(200,000 troops)		(200,000 tons)		(500 aircraft)

During the four-year tenure of Donald Trump’s presidency from January 2017 to January 2021, global competition across the political, economic, and military realms has become more prominent, while some progress has been made in military operations against international terrorist organizations. Under these new security environments, the Trump administration has significantly changed the patterns of U.S. involvement in the world based on the “America First” policy and the realist concept that power plays a central role.

The Trump administration branded China and Russia as revisionist powers in its strategy documents outlining national security and defense policies, and clarified its intention to focus on strategic competition with those two countries.

This administration indicated its willingness to place the greatest emphasis on the security of the Indo-Pacific region to deter China in particular, and maintain a forward military presence in the region. In terms of actions focused on China, U.S. naval vessels repeatedly carried out “Freedom of Navigation Operations” in the South China Sea and transit through the Taiwan Strait. In addition, the administration bolstered its stance of deterrence against China through tightening measures aimed at preventing technology theft and ensuring competitiveness in technological fields where there is a risk of being diverted to military use.

The Trump administration positioned deterrence against Russia in Europe as the next-highest priority in its national defense strategy after deterrence against China in the Indo-Pacific region.

In light of Russian actions concerning Ukraine, the United States has deployed the U.S. forces in Eastern Europe to strengthen involvement in North Atlantic Treaty Organization (NATO) security and deterrence, and substantially increased the budget related to the European Deterrence Initiative—a program intended to increase the U.S. military presence—compared with the sums invested

under the Obama administration. The United States has also undertaken initiatives focused on the development and deployment of low-yield nuclear weapons to fill the capability gap to Russia’s non-strategic nuclear weapons.

In response to the actions and policies by North Korea—named in the strategy documents as a “rogue regime”—to pursue nuclear and missile programs, the United States has maintained sanctions and continued its efforts to pursue the complete denuclearization of North Korea.

 See 1-3 of this Section (Engagement in the Indo-Pacific Region), p. 49

In addition, the United States has been increasing pressure in various aspects on Iran, also classified as “rogue regime” in the strategy documents, to bring Iran back to the negotiation table.

In regard to defeating Islamic extremist terrorist groups that was categorized as the top priority issue to be addressed at the beginning of the Trump administration, the United States announced in March 2019 that all territories of Iraq and Syria ruled by the Islamic State of Iraq and the Levant (ISIL) had been released. In October of the same year, an announcement was made on the death of the leader of ISIL due to the U.S. Forces’ operation.

With regard to Afghanistan, in February 2020, the United States signed an agreement with the Taliban that included a conditional phased withdrawal by U.S. Forces. In January 2021, Acting United States Secretary of Defense Christopher Miller announced that the United States reduced the number of stationed forces in Iraq and Afghanistan to the level of 2,500 people respectively. In addition to these moves, the Trump administration had reduced the U.S. Forces in the Middle East and Africa regions, including the announcement that most units would be withdrawn from Somalia.

Additionally, under the policy of “Peace through strength,” the Trump administration increased the defense budget, which had been on a downward trend, restored the

readiness of the U.S. Forces, and promoted modernization of the forces. Furthermore, the administration indicated its view that some allies which are pointed out as bearing only a small burden of cost should shoulder their fair share of the cost.

Under these circumstances, President Biden, who took office on January 20, 2021, called for the necessity of unity, not division, to American people in his inaugural address, while towards the international community, he expressed his basic stance that the United States will reengage itself in the world again by repairing its alliances, and lead the world not merely through demonstration of power, but with credibility and moral authority. In regard to the point of showing power, President Biden stated in his remarks to the Department of Defense (DoD) in February 2021 that he would not hesitate to use force when necessary, but he also emphasized his belief that “force should be a tool of last resort, not first.”

Meanwhile, President Biden, in his address on diplomatic policies in February, revealed the foreign policy framework in response to the basic stance mentioned earlier. In this speech, the President expressed his recognition that the country would have to respond to a new era with global issues such as the spread of infectious diseases, climate change, and nuclear proliferation, as the authoritarianism by China and Russia progresses. The President then stated that these issues would not be dealt with by the United States alone and expressed the need to work closely with U.S. allies and partners, recognizing alliances as the greatest asset to the country. In addition, President Biden also indicated that a clear line between foreign and domestic policies no longer exists, and that the United States would place an urgent focus on domestic economic renewal.

With regard to military policy, the Biden administration clarified its intent to conduct a global posture review of the U.S. Forces. In line with this speech by the President, U.S. Defense Secretary Austin announced a statement which stated the intention of the United States to implement a global posture review concerning the U.S. Forces’ deployment, resources, strategies and missions while consulting with its allies and partners.

In the Interim National Security Strategic Guidance (hereinafter “Interim Guidance”) published in March 2021, the Biden administration announced the policy to put the highest priority on the U.S. military presence in the Indo-Pacific and Europe. In particular, the administration described China as “the only competitor with the potential ability to mount a sustained challenge

to a stable and open international system” and indicated its intent to counter China for a long term.

The Biden administration has adopted a policy focused on initiatives based on a tough stance towards China, which would allow the United States to win strategic competition with China by rebuilding American advantage through reinforcing domestic economic foundations, reclaiming its leading role in international institutions, defending democratic values at home and around the world, modernizing U.S. military capabilities, and revitalizing its alliances and partnerships.

In regard to the relationship with China, President Biden shows his intention to pursue cooperation in areas with shared interests, such as climate change and arms control, and become involved in issues with China by working with its allies and partners.

Concerning the U.S. policy on North Korea, the Biden administration clarifies its intent to proceed with its review, while working in close consultation with its allies and partners.

With respect to Europe, the Biden administration intends to conduct a comprehensive review of its relationship with Russia, taking into consideration Russia’s “malign activities”¹ and based on a policy that does not allow such activities seen in recent years. While implementing a global posture review, as described above, the administration will halt the withdrawal of the U.S. Forces from Germany, which was announced by the Trump administration.²

Regarding the Middle East, the United States intends to bring a responsible end to the long war in the region, and in April 2021, President Biden announced the plan to withdraw the U.S. Forces in Afghanistan by September 11 of the same year. If Iran returns to strict compliance with the nuclear agreement, President Biden expresses the U.S. position to return to the agreement as a starting point for further negotiation. On top of these, the Biden administration indicated its policy to end the U.S. support for offensive operations in the military conflict in Yemen, improve diplomacy for conflict resolving, and continue to support the defense of Saudi Arabia.

Amid the inauguration of the new administration and the indication of the direction of foreign policy based on international cooperation, attention should be paid to the trend of overall review of the security policy, which will be conducted with a focus on the discussions with U.S. allies and partners. Meanwhile, while addressing countermeasures against the COVID-19 infection, which the Biden administration positioned as the most

¹ The U.S. National Security Advisor Jake Sullivan in the press briefing on February 4, 2021 and U.S. Department of State Spokesperson Ned Price in the Department Press Briefing on February 2, 2021 mentioned “Russia’s malign activities.”

² In July 2020 during the Trump administration, the DoD announced the restructuring plan of the U.S. European Command with primary focus on the U.S. Forces in Germany. According to this plan, approximately 11,900 personnel will be relocated from Germany, cutting the size of the U.S. Forces in Germany from roughly 36,000 to about 24,000.



President Biden delivering his inauguration speech in January 2021
[the U.S. Department of State]

prioritized issue, and domestic political division, which is also positioned as an issue requiring reconciliation, attention will be paid to what impacts the financial and political resources needed for these issues will have on U.S. security policy.

1 Perception about Security Environment

The National Security Strategy (NSS) released in December 2017 during the Trump administration mentioned the three main sets of challengers against the United States and its allies and partners, which are the “revisionist powers” of China and Russia, the “rogue states” of Iran and North Korea, and “transnational threat organizations” including jihadist terrorist groups.

In addition, the National Defense Strategy (NDS) published in January 2018 points out that the primary concern in U.S. security is not terrorism but rather long-term strategic competition with China and Russia. It also mentioned that China and Russia were undermining the free and open international order constructed by the United States and its allies, and it was increasingly clear that China and Russia wanted to shape a world consistent with their authoritarian model.

The Biden administration indicates in the Interim Guidance that global challenges such as the spread of infectious diseases, climate change, and proliferation of weapons of mass destruction will bring serious threats, and that “we must contend with the reality that the distribution of power across the world is changing, creating new threats.” The Guidance shows a view that China and Russia have put considerable energy into weakening American power and obstructing the U.S. efforts to protect its interests and allies, with China in particular rapidly increasing its external assertions. In relation to this point, in his remarks to DoD Personnel in February 2021, President Biden emphasized his view that the U.S. would need to meet the challenges posed by China, and mentioned a “China Task Force” established by the DoD to consider the strategy, operational concepts,

and force posture of the United States. The current administration, in the Interim Guidance, positions Iran and North Korea as regional actors and evaluates that these countries “continue to pursue game-changing technologies, while threatening U.S. allies and partners and challenging regional stability.” In addition, the Biden administration also shows a view that the United States “faces challenges within countries whose governance is fragile, and from influential non-state actors that have the ability to disrupt American interests” and terrorism and violent extremism remain significant threats. In consideration of these recognitions, the United States, in line with the Trump administration, positions threats posed by China and Russia—with particular emphasis on China—as priority issues to be addressed and appears to implement a policy of dealing with threats posed by North Korea, Iran, and radical terrorist groups, as well as production, proliferation, and use of weapons of mass destruction. Furthermore, the Biden administration expresses high interest in the impact of climate change on security issues. Given that Secretary of Defense Austin mentioned at the Leaders’ Summit on Climate hosted by President Biden in April 2021 that the perspective of climate change would be essential for future U.S. security policy, it is deemed that the U.S. security policy will be promoted based on climate change issues.

2 Security and NDS

The NSS developed by former President Trump is rooted in the America First policy and realism in which power plays a central role in international politics, and stresses the need to rethink the policies of the past 20 years that were based on the assumption that engagement with rivals and their inclusion in the international community would turn them into benign actors and trustworthy partners. Moreover, the NSS sets up a strategic policy to protect four vital interests in this competitive world: (1) Protect the American people, the homeland, and the American way of life; (2) Promote American prosperity; (3) Preserve peace through strength; and (4) Advance American influence.

Furthermore, in addition to rebuilding the U.S. military to the strongest armed forces and strengthening capabilities in many areas including space and cyberspace, the United States is also striving to leverage the balance of power in the Indo-Pacific, Europe, and the Middle East. Moreover, while recognizing that allies and partners are a great strength of the United States and close cooperation is necessary, the United States has demanded that its allies and partners demonstrate the will to confront shared threats and contribute the capabilities. It is also pointed out that although the United States is

responding to the growing political, economic, and military competition throughout the world, by ensuring American military power is second to none and fully integrating with its allies all instruments of power, the United States will seek areas of cooperation with competitors from a position of strength.

The NDS drawn up by then Secretary of Defense Mattis based on the NSS considers the long-term competition with China and Russia as the principal priorities of the DoD because of the potential for the threats they pose to U.S. security and prosperity to increase. Moreover, to expand the competitive space, the following three lines of effort are raised: (1) building a more lethal Joint Force; (2) strengthening alliances and attracting new partners; and (3) reforming the DoD for greater performance and affordability.

Among these, (1) Building military power prioritizes preparedness for war and in order to defeat aggression by a major power and deter opportunistic aggression elsewhere, it advances building flexible theater postures and force deployment that offer mobility, resilience, and readiness. It also advocates modernizing key capabilities such as nuclear forces, space and cyberspace, C4ISR (command, control, communication, computer, intelligence, surveillance, and reconnaissance), missile defense, and advanced autonomous systems, etc. Further, although indicating its commitment to deter aggression, it also demonstrates the stance that dynamic military force employment, military posture, and operations must introduce unpredictability to adversary decisionmakers. For (2) Strengthening alliances, the following three matters are emphasized: (i) Uphold a foundation of mutual respect, responsibility, priorities, and accountability, (ii) Expand regional consultative mechanisms and collaborative planning, and (iii) Deepen interoperability. On the other hand, there are expectations that allies and partners contribute an equitable share to mutually beneficial collective security, including effective investment in modernizing their defense capabilities.

In March 2021, the Biden administration published the Interim Guidance to indicate the direction taken by the United States while the formulation of the national security strategy is still in progress. This Guidance states the necessity to renew the United States' enduring advantages in order to meet today's challenges from a position of strength, and that begins with the revitalization of democracy, which is the most fundamental advantage of the United States. More specifically, the Guidance shows the future direction of the country's efforts in the

form of: defending and nurturing the underlying sources of American strength including democracy, economy, national defense and so on; promoting a favorable distribution of power to deter and prevent adversaries; and leading and sustaining a stable and open international system. The administration also expresses in the Guidance that the United States is unable to achieve these objectives alone. For that reason, the United States will reinvigorate its alliances and partnerships around the world, while also showing its intention to work with allies to share responsibilities equitably and encourage them to invest in their own comparative advantages. In terms of the military aspect, the Biden administration ensures that the U.S. Forces will receive the best training in the world and continue to be a fully equipped armed forces, while shifting its "emphasis from unneeded legacy platforms and weapons systems to free up resources for investments in the cutting-edge technologies and capabilities." In addition, the Guidance states the plan that the United States will prioritize defense investment in climate resiliency and clean energy.

The Biden administration has continued to conduct a general review of national security policies even after the publication of the Interim Guidance. The details of the United States' new national security policies and national defense strategy formulated under the current administration will attract attention.³

3 Engagement in the Indo-Pacific Region

The Trump administration positioned the Indo-Pacific region as the highest-priority region for the United States and showed a stance of placing importance on the region through the United States' commitment to the region and strengthening its presence.

During his November 2017 trip to Asia, in sympathy with Japan's vision for a "Free and Open Indo-Pacific," former President Trump expressed his intention to emphasize compliance with principles such as respecting the rule of law and freedom of navigation, and that he would promote a "Free and Open Indo-Pacific" region, as well as strengthen alliances in the region.

In relation to this, the NSS emphasizes that China seeks to displace the United States in the Indo-Pacific region and reorder the region in its favor, as well as having mounted a rapid military modernization campaign to limit U.S. access to the region and to provide itself a freer hand there.

In the same way, the NDS pointed out that "China is

³ Both the National Security Strategy (NSS) and the National Defense Strategy (NDS) are required by law to be submitted to Congress within a certain period of time. Titles 50 and 10 of the United States Code respectively stipulate that the NSS shall be submitted to Congress no later than 150 days after the date on which a new President takes office, and the NDS shall be submitted as soon as possible after a newly elected President has nominated a new Secretary of Defense, once the Senate has approved the nomination.

leveraging military modernization, influence operations, and predatory economics to coerce neighboring countries to reorder the Indo-Pacific region to their advantage” and is seeking regional hegemony.

Meanwhile, the Indo-Pacific Strategy Report (IPSR) of the U.S. DoD, which was released in June 2019, fleshes out this policy in accordance with the characteristics of the Indo-Pacific region while retaining the strategic directions of the NSS and the NDS. Noting first of all that it is necessary to establish a force that is prepared to win any conflict from its onset in order to achieve peace through strength, the IPSR states that the United States will ensure that combat-credible forces are forward-postured in the Indo-Pacific region and will prioritize investments that ensure lethality against high-end adversaries. Next, arguing that the network of allies and partners is a force multiplier to achieve deterrence, the IPSR states that the United States will reinforce its commitment to established alliances and partnerships while also expanding and deepening relationships with new partners. The IPSR also indicates that the United States will evolve U.S. alliances and partnerships into a networked security architecture to uphold the international rules-based order.

In July 2020, regarding China’s maritime expansion, after the U.S. DoD expressed concern about China’s decision to conduct military exercises in the South China Sea, the United States deployed two Carrier Strike Groups in the South China Sea for the first time in six years and conducted naval exercises, and again gathered two carrier strike groups to carry out exercises within the same month. In this situation, then Secretary of the State Mike Pompeo announced the stance of the United States in the same month that China’s claim regarding the resources for almost the entire South China Sea and its activities attempting to control the resources were completely illegal, and that there was no legal ground for China’s unilateral imposition of its intention to others. Based on this announcement, the Trump administration

refused Chinese behavior of imposing the idea of “power is justice” in the South China Sea and other waters. In addition, in the “United States Strategic Approach to The People’s Republic of China,” announced in May 2020, the United States indicated that, as part of its worldwide Freedom of Navigation Operations program, it would counter China’s hegemonic assertions and excessive claims, while, in August 2020, then Secretary of the State Pompeo stated that the U.S. DoD was reinforcing the Freedom of Navigation Operations in the East China Sea, the South China Sea, and the Taiwan Strait.

As part of its activities around strengthening its presence in the Indo-Pacific region, the U.S. Forces deployed Marine Corps specification F-35B fighters to MCAS Iwakuni in January 2017. The USS America, an amphibious assault ship with enhanced ability to carry F-35B fighters and other carrier-based planes, arrived in Sasebo in December 2019 to replace the amphibious assault ship USS Wasp. In addition, the amphibious transport dock USS New Orleans was also deployed to Sasebo that month. In Guam, the MQ-4C Triton maritime surveillance unmanned aircraft system underwent its first deployment in January 2020. Between January and November 2019, the U.S. Coast Guard deployed patrol boats on a rotational basis in the western Pacific Ocean while working with the Seventh Fleet, and in October 2020 the policy to deploy patrol boats in the western Pacific Ocean was announced. The Army plans to deploy a Multi-Domain Task Force in the region, to undertake operations simultaneously in all domains including the aspect of human cognition. In relation to this, the Marine Corps expresses the idea of establishing the Marine Littoral Regiment, which will focus on the sea control and sea denial missions, and deploying it in the region. In March 2018, the aircraft carrier USS Carl Vinson made the first port call by a U.S. aircraft carrier in over 40 years in Vietnam. Another port call in the country was made in March 2020, by the aircraft carrier USS Theodore Roosevelt.

The Biden administration announced that President Biden had asserted the maintenance of the vision of a “Free and Open Indo-Pacific” as a priority matter in the U.S.-China summit telephone talk in February 2021 to clarify the U.S. posture to pursue the vision would remain unchanged. Similarly, in the summary announced after the telephone conference between foreign ministers of the United States and the Philippines in January 2021, the two foreign ministers reaffirmed the importance of the U.S.-Philippines Alliance for a “Free and Open Indo-Pacific,” and the United States clearly expressed its stance to reject China’s excessive claims for maritime interest in the South China Sea, which was exceeding the range allowed under the United Nations Convention on the Law of the



July 2020, Nimitz and Ronald Reagan Carrier Strike Groups conducting exercises in the South China Sea [U.S. Navy]

Sea (UNCLOS). With this stance, since February 2021, the Biden administration announced multiple times that it had sent U.S. Navy vessels to pass through the Taiwan Strait to show the U.S. commitment to a “Free and Open Indo-Pacific.” In the same month, the administration also announced that the United States implemented Freedom of Navigation Operations in the South China Sea. At this announcement, the United States clearly indicated that it bears a number of responsibilities in the Indo-Pacific region, with the protection of the rights and freedom of navigation in accordance with international law being one of the responsibilities, and therefore, the country would continue the Freedom of Navigation Operation. Furthermore, the Biden administration announced that the United States had deployed two Carrier Strike Groups in the South China Sea in February 2021 and also that U.S. carrier strike groups and amphibious ready groups had conducted integrated exercises in the same area in April 2021. The current administration expressed its intention to continue showing its allies and others in the region the efforts by the United States to promote a “Free and Open Indo-Pacific.”

Based on the posture towards the Indo-Pacific described above, the United States appears to continue to be undertaking initiatives based on its vision of a “Free and Open Indo-Pacific.”

In contrast, while talks between the United States and North Korea have been conducted since their first summit meeting in history held in June 2018, no specific progress has been seen with regard to the dismantlement of North Korea’s missiles and weapons of mass destruction. Responding to that summit meeting, the U.S. DoD suspended the U.S.-ROK command and control exercise Ulchi-Freedom Guardian and the scheduled Vigilant Ace U.S.-ROK bilateral annual flying exercise, and then decided to conclude the Key Resolve and Foal Eagle series of exercises usually held by the United States and the ROK every spring. Then Acting Secretary of Defense Patrick Shanahan expressed a willingness to maintain U.S. Forces in the ROK, stating that close coordination between the military activities of the United States and the ROK will continue to support diplomatic efforts and that the two countries were committed to ensuring the continued combined defense posture of U.S.-ROK combined forces and maintaining firm military readiness.

Amid this situation, as well as firing at least 20 ballistic missiles from May 2019 onwards, North Korea announced in December 2019 that it would continue to develop strategic weapons until the United States rolls back its hostile policy.

In January 2021, according to North Korea’s announcement, Chairman Kim Jong-un called the United

States North Korea’s “biggest enemy” and expressed his view that whoever would be in power in the United States, the U.S. policy on North Korea would not change, while also remarking that the key to establishing a new U.S.-North Korea relationship would be the withdrawal of the hostile policy by the United States.

The Biden administration sees that North Korea continues with its nuclear and missile plans, positions it as an urgent priority issue to the United States, and clarifies its policy on continuing to work on North Korea denuclearization. Since the Biden administration has announced its policy for conducting a comprehensive review of the U.S. policy toward North Korea, attention will be paid to the details of the new North Korea policy, which will be formulated under the current administration.

The FY2021 National Defense Authorization Act, which was enacted in January 2021, stipulates the establishment of a program known as the Pacific Deterrence Initiative (PDI). The PDI is intended to strengthen the U.S. deterrence and defence posture in the Indo-Pacific Region, provide security to allied nations and partners, and strengthen U.S. regional capabilities and readiness. The specific contents of the PDI will gain attention in the future.

 See Section 4-1-5 (1) (Relations with the United States), p. 112

4 Innovation in the National Defense Field

The Trump administration positioned DoD innovation initiatives as one of the top priorities. The NSS under the former administration outlines a policy that the United States must harness innovative technologies that are being developed outside of the traditional defense industrial base. The NDS also states that the DoD needs innovation to surpass revisionist powers, and calls for extensive investment in the military application of autonomy, artificial intelligence, and machine learning (AI/ML), including the rapid application of commercial breakthroughs, to gain competitive military advantages.

In President Biden’s remarks at the DoD in February 2021, the Biden administration, emphasizing the importance of technologies in national defense strategies, stated that the United States would deal with dangers and opportunities generated through emerging technologies, enhance its capabilities in cyberspace, and lead in a new era of competition from deep sea to outer space. With regard to strategic competition with China, President Biden has indicated the view that technological competition including innovation would become one of the central issues. Attention should be paid to further efforts in this area.

5 Nuclear and Missile Defense Policy

The Nuclear Posture Review (NPR) released by the Trump administration in February 2018 stated that, although the United States had reduced the role and number of nuclear weapons based on the aspiration that if the United States took the lead in reducing nuclear arms, other states would follow, the global threat conditions have worsened markedly since the most recent NPR released in 2010 and there now exist unprecedented threats and uncertainty, as China and Russia have expanded their nuclear forces and North Korea continues its pursuit of nuclear weapons and missile capabilities. Given these circumstances, the following were raised as the roles of U.S. nuclear forces: (1) Deterrence of nuclear and nonnuclear attacks; (2) Assurance of allies and partners; (3) Achievement of U.S. objectives if deterrence fails; and (4) Capacity to hedge against an uncertain future.

Also, while the United States would only consider the employment of nuclear weapons in extreme circumstances to defend the vital interests of the United States, its allies, and partners, the NPR clearly states that extreme circumstances could include significant non-nuclear strategic attacks against the United States and its allies, and a “no first use” policy is not justified today. It also indicates that the United States maintains a policy of retaining some ambiguity regarding the precise circumstances that might lead to a U.S. nuclear response. Furthermore, it also revealed that the United States would apply a tailored approach to deterrence across a spectrum of adversaries, threats and contexts, and in addition, would ensure effective deterrence by enhancing the flexibility and range of its nuclear capabilities through nuclear modernization and the development and deployment of new capabilities. Specifically, in addition to sustaining and replacing the nuclear triad,⁴ as new capabilities, in the near-term, the United States would modify a small number of existing submarine-launched ballistic missiles (SLBM) warheads to provide a low-yield option,⁵ and in the longer term, pursue a nuclear-armed sea-launched cruise missile (SLCM), leveraging existing technologies, as well as incorporate nuclear capability onto F-35A fighters as a replacement for the current aging dual-capable aircraft (DCA). Also, the United States has shown its commitment to extended deterrence for its allies and, if necessary, maintaining the forward-deployed capability with DCA and nuclear weapons in regions outside Europe, including Northeast Asia.

On August 2, 2019, the Trump administration decided to withdraw from the Intermediate-Range Nuclear Forces (INF) Treaty with Russia as the administration alleged that Russia violated the treaty.

On the same day, then Secretary of Defense Esper announced that the DoD will fully pursue the development of intermediate-range, conventional, ground-launched cruise and ballistic missile systems whose test launches, production and possession had been restricted by the treaty. In August 2019, the United States conducted a flight test of a conventionally-configured ground-launched cruise missile with a range of more than 500 km and subsequently conducted a flight test of a prototype similarly configured ground-launched ballistic missile that December.⁶ Former President Trump mentioned the need for arms control involving China, which has beefed up medium-range missile capabilities outside the scope of the INF Treaty.

In the Interim Guidance, the Biden administration states that the United States will “take steps to reduce the role of nuclear weapons in our national security strategy, while ensuring our strategic deterrents remain safe, secure, and effective, and that our extended deterrence commitments to our allies remain strong and credible.” The administration also mentions its intention to avoid costly arms races, to pursue the establishment of a new arms control framework if possible, and to “engage in meaningful dialogue with Russia and China on a range of emerging military technological developments that implicate strategic stability.” In February 2021, the Biden administration extended the New START Treaty (Strategic Arms Reduction Treaty) for five years until February 5, 2026, based on the agreement with Russia. The extension of the New START Treaty seems to be based on the administration’s plan indicated in the Interim Guidance. President Biden stresses that the New START Treaty extension is only the beginning of U.S. efforts to address 21st century security challenges, and the country will pursue further enhancement of the framework for controlling nuclear weapons, using the time provided by a five-year extension. First of all, regarding the New START Treaty to which launchers, deployed missiles, bombers, and deployed nuclear warheads related to nuclear triad are subject, the administration indicates that it will pursue the framework for arms control that addresses all kinds of nuclear weapons with the Russian Federation, in consultation with Congress and U.S. allies and partners. In addition, President Biden indicates that the United States will also pursue the arms control

⁴ The nuclear triad consists of Minuteman III ICBM, Ballistic Missile Submarines (SSBN) armed with Trident II D5 SLBM, and strategic bombers B-52 and B-2.

⁵ In February 2020, then Under Secretary of Defense John Rood disclosed that the U.S. Navy had already deployed the W76-2 low-yield nuclear warhead to be carried by SLBMs. This complementary capability is regarded as showing Russia and other potential adversaries that there is no advantage in the limited use of nuclear weapons.

⁶ In August 2019, then Secretary of Defense Esper remarked that it was going to take a few years to actually have newly developed ground-launched cruise and ballistic missiles to be able to deploy.

framework to reduce risks by China's modern and growing nuclear arsenal.

 See Section 5-3-1 (Nuclear Forces), p. 121

At the same time, the Missile Defense Review (MDR) published by the Trump administration in January 2019 noted that North Korea continues to pose an extraordinary threat to the United States and, with its nuclear missiles, has the ability to threaten the U.S. homeland, as well as U.S. territories, U.S. Forces, and allies in the Pacific Ocean. It also pointed out that Russia and China are developing advanced cruise missiles and hypersonic missiles that challenge existing missile defense systems. The MDR sets out three principles governing U.S. missile defense: (1) homeland missile defense will stay ahead of rogue states' missile threats; (2) missile defense will defend U.S. Forces deployed abroad and support the security of allies and partners; and (3) the United States will pursue new concepts and technologies. It cited the elements of missile defense strategy as (1) comprehensive missile defense capabilities; (2) flexibility and adaptability; (3) tighter offense-defense integration and interoperability; and (4) importance of space. The MDR then presented a policy of adopting a balanced and integrated approach based on a combination of (1) deterrence; (2) active and passive missile defenses; and (3) attack operations.

Under this policy, the United States plans to expand investment in expanding and modernizing U.S. homeland missile defense capabilities by such means as deploying an additional 20 ground-based interceptors by 2023, improving and deploying radar systems, and pursuing efforts to counter intercontinental ballistic missiles (ICBM) using SM-3 Block IIA. For regional defense, on the other hand, the United States will procure additional interceptor missiles for the Terminal High Altitude Area Defense (THAAD), Aegis, and Patriot systems, as well as increasing the number of Aegis BMD capable ships, and equipping Aegis Ashore sites with the SM-3 Block IIA. Regarding the pursuit of new technologies, the MDR sets out a policy of developing the Multi-Object Kill Vehicle (MOKV) to improve the ability to engage ICBM warheads and decoys, as well as undertaking research and development focused on (1) directed-energy weapons; (2) space-based interceptor systems; and (3) interceptor missiles with which F-35 fighters can be equipped, to

enable space-based sensors to be deployed and interception to be carried out in the boost phase, with a view to countering advanced threats, including hypersonic glide vehicles (HGVs). As far as collaboration with allies and partners is concerned, the MDR indicates a willingness to focus on deepening interoperability, expanding burden sharing, and encouraging investment by allies in missile defense capabilities that are interoperable with those of the United States.

The Biden administration has not published any strategic documents showing its policy concerning missile defense programs. However, given that, in March 2021, the commander of the U.S. Indo-Pacific Command called for the importance of deploying Aegis Ashore in Guam, missile defense seems to remain a key policy area. The current administration's future efforts in this area will attract attention.

6 FY2022 Budget

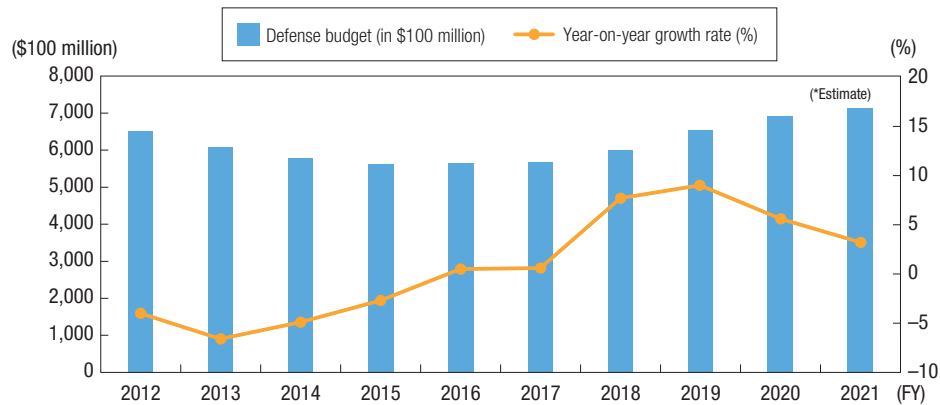
In May 2021, the Biden administration released the President's request for FY2022 discretionary funding. The President's discretionary request for the DoD is US\$715 billion, an approximately 1.6% increase from the previous year. In the budget, the DoD has prioritized: (1) defeating the COVID-19 pandemic; (2) countering the pacing threat from China; (3) deterring threats emanating from Russia, Iran, and North Korea; (4) innovating and modernizing technologies such as hypersonic weapons and artificial intelligence; and (5) tackling the climate crisis, reflecting the strategic direction indicated in the Interim Guidance.

The DoD has also requested US\$5.1 billion for the PDI to maintain a conventional military advantage necessary to deter aggression in the Indo-Pacific region. It has also prioritized nuclear enterprise modernization and developing and fielding long range fires, and has requested a US\$112 billion research and development budget for science and technology and advanced capability enablers, its largest ever. The goals for military end strength include securing 1,346,400 troops, a decline of around 4,600 from FY2021, and, in terms of equipment, the procurement of 85 F-35 fighters (96 in FY2021).

 See Fig. I-2-1-1 (Changes in the U.S. Defense Budget)

Fig. I-2-1-1

Changes in the U.S. Defense Budget



Notes: 1. Figures shown are narrowly defined expenses based on historical tables (outlays).
2. The amount for FY2021 is an estimate.

2 Military Posture

1 General Situation

The operation of the U.S. Forces is not controlled by the individual branches of the broader armed forces; rather it is operated under the command of the Unified Combatant Commands, composed of forces from multiple branches of the armed forces. The Unified Combatant Commands consist of four commands with functional responsibilities and seven commands with regional responsibilities.

The U.S. ground forces have about 480,000 Army soldiers and about 180,000 Marines, which are forward-deployed in Germany, the ROK, and Japan, among other countries.

The U.S. maritime forces have about 970 vessels (including about 70 submarines) totaling about 7.3 million tons. The 7th Fleet is responsible for the western Pacific and the Indian Ocean; the 3rd Fleet in the eastern Pacific; the 4th Fleet in South America and the Caribbean Sea; the 2nd Fleet in U.S. East Coast, North Atlantic Ocean, and Arctic Ocean; the 6th Fleet in the Mediterranean Sea and Africa; and the 5th Fleet in the Persian Gulf, the Red Sea, and the northwest Indian Ocean.

The U.S. air forces have roughly 3,530 combat aircraft across the Air Force, Navy, and Marine Corps.

In addition to carrier-based aircraft deployed at sea, part of the tactical air force is forward-deployed in Germany, the United Kingdom, Japan, and the ROK, among others.

In regard to strategic offensive weapons including nuclear force, the United States under the former Obama administration proceeded with their reduction based on a new Strategic Arms Reduction Treaty that came into force in February 2011. It announced that its deployed strategic warheads⁷ stood at 1,357, while its deployed delivery platforms stood at 651.⁸ The United States is studying the concept of a Conventional Prompt Global Strike (CPGS), as an effort contributing to the nation's new ability to reduce reliance on nuclear weapons.

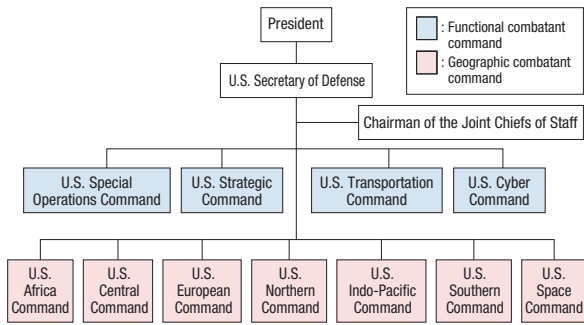
Moreover, in addressing the increasing threats in cyberspace, in May 2018, the Cyber Command, which was previously a subunified command under U.S. Strategic Command, was elevated to a unified combatant command.

In August 2019, the United States founded the Space Command to serve as a geographic unified combatant command and then established the Space Force as the sixth branch of the military within the Department of the Air Force that December.

 See Fig. I-2-1-2 (Structure of the Unified Combatant Command)

⁷ Warheads that have been equipped in deployed ICBMs and SLBMs and nuclear warheads equipped in deployed heavy bombers (a deployed heavy bomber is counted as one nuclear warhead).
⁸ The figure as of March 1, 2021.

Fig. I-2-1-2 Structure of the Unified Combatant Command



2 Current Military Posture in the Indo-Pacific Region

The United States, a Pacific nation, continues to play an important role in ensuring the peace and stability of the Indo-Pacific region by deploying the Indo-Pacific Command, a combatant command integrating the Army, Navy, Air Force and Marine Corps in the region. The Indo-Pacific Command is a geographic combatant command which is responsible for the largest geographical area, and its subordinate unified commands include U.S. Forces Japan and U.S. Forces Korea.

The Indo-Pacific Command consists of the U.S. Army Pacific, U.S. Pacific Fleet, U.S. Marine Corps Forces Pacific, and U.S. Pacific Air Forces, which are all headquartered in Hawaii.

The Army Pacific’s subordinate commands include the 25th Infantry Division in Hawaii, the 8th U.S. Army in the ROK, which is the Army component of the U.S. Forces

in the ROK, and the U.S. Army Alaska. Additionally, the Army Pacific assigns approximately 2,500 personnel to commands in Japan, such as I Corps (Forward) and the Headquarters, U.S. Army Japan Command.⁹

The U.S. Pacific Fleet consists of the 7th Fleet, which is responsible for the Western Pacific and the Indian Ocean, and the 3rd Fleet, responsible for the East Pacific and Bering Sea. The U.S. Pacific Fleet in total controls about 200 vessels.¹⁰ The 7th Fleet mainly consists of a carrier strike group with main stationing locations in Japan and Guam. Their mission is to defend territorial lands, people, sea lines of communication, and the critical national interests of the United States and its allies. An aircraft carrier, amphibious ships, and Aegis cruisers among others are assigned to the 7th Fleet.

The U.S. Marine Corps Forces Pacific deploys one Marine Expeditionary Force each in the U.S. mainland and Japan. Of this force, about 21,000 personnel are in the 3rd Marine Division and the 1st Marine Aircraft Wing, which are equipped with F-35B fighters and other aircraft, in Japan. In addition, maritime pre-positioning ships loaded with heavy equipment and others are deployed in the Western Pacific.¹¹

The U.S. Pacific Air Force has three air forces, of which three air wings (equipped with F-16 fighters and C-130 transport aircraft) are deployed to the 5th Air Force stationed in Japan and two air wings (equipped with F-16 fighters) to the 7th Air Force stationed in the ROK.

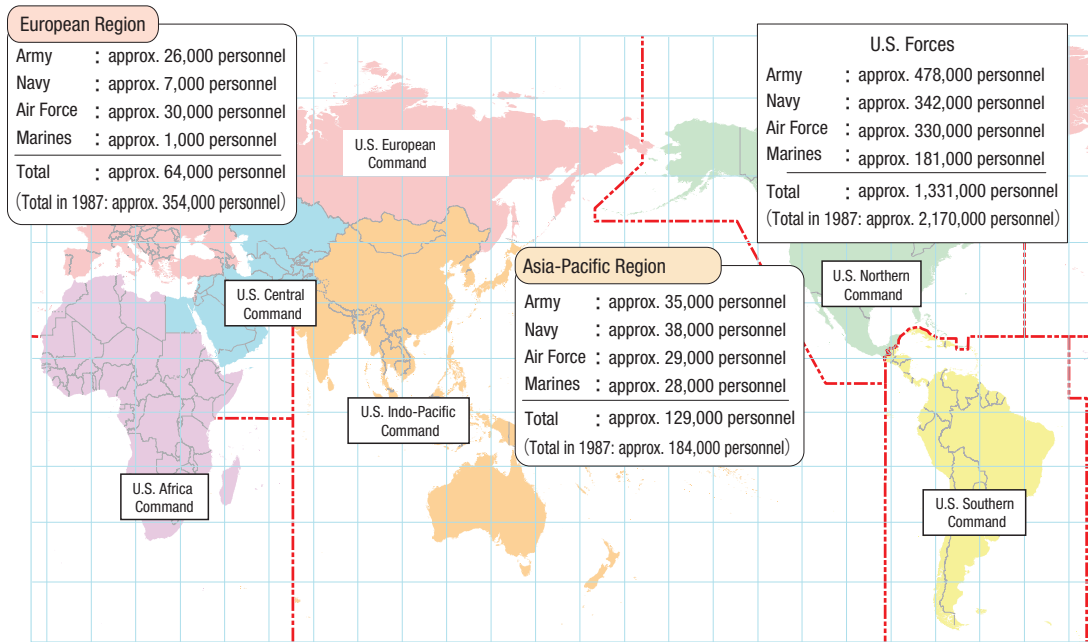
Fig. I-2-1-3 (U.S. Forces Deployment Status)
Fig. I-2-1-4 (U.S. Forces Involvement in the Indo-Pacific Region [image])

⁹ The figures of the U.S. Forces mentioned in this paragraph are the numbers of active personnel recorded in the published sources of the U.S. DoD (as of December 31, 2020), and could change according to unit deployment.

¹⁰ In the Senate hearing in December 2020, Kenneth J. Braithwaite, Secretary of the U.S. Navy, proposed that the Navy would create the First Fleet with the area of responsibility in the Indo and South Asia region in order to improve the posture of the Navy in the Indo-Pacific region. Regarding the First Fleet, Secretary Braithwaite explained that it would belong to the U.S. Pacific Fleet and would take some load off the Seventh Fleet by dividing the area of responsibility the Seventh Fleet currently covers.

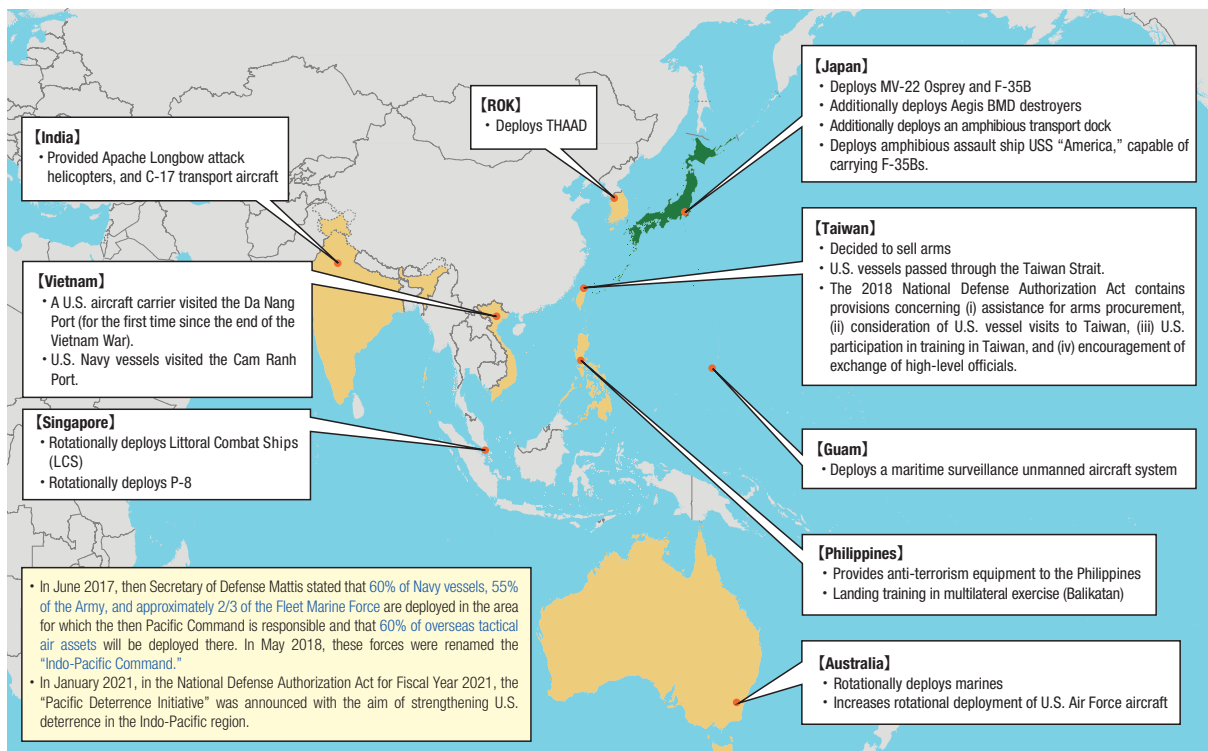
¹¹ See footnote 9.

Fig. I-2-1-3 U.S. Forces Deployment Status



Notes: 1. Source: Documents published by the DoD (as of December 31, 2020), etc.
 2. The number of personnel deployed in the Asia-Pacific region includes personnel deployed in Hawaii and Guam.

Fig. I-2-1-4 U.S. Forces Involvement in the Indo-Pacific Region (image)



Section 2

China

1 General Situation

China, the world's most populous country, has a vast landmass surrounded by a long borderline as well as a long coastline. It also has various races, religions, and languages. China's pride in its unique history of having shaped a distinct culture and civilization, and semi-colonial experience in and after the 19th century are driving its desire for a strong nation and fueling its nationalism.

China faces various domestic problems including human rights issues. Among the problems emerging are the spread of bribery and corruption among the leadership of the Chinese Communist Party (CCP) and such issues as disparities between urban and rural areas, and between coastal and inland regions, as well as disparities within cities and environmental pollution. More recently, the pace of China's economic growth has slowed and the country is also expected to face issues associated with the rapid aging of the population, including problems related to pensions and other aspects of the social security system. The range of factors potentially destabilizing government administration has thus been expanding and becoming increasingly diverse. Additionally, there have been protests about human rights violations against ethnic minorities in China and campaigns pursuing separation and independence of the Tibet Autonomous Region, the Xinjiang Uyghur Autonomous Region, and elsewhere. The international community has grown interested in human rights conditions in the Xinjiang Uyghur Autonomous Region. In response to a series of large-scale protest occurred since 2019, the "Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region" was established and enforced in June 2020. However, on the Hong Kong Special Administrative Region Establishment Day on July 1, 2020, some people were arrested for violating this law, indicating the concerns about the government measures spreading among the people. Amid these circumstances, the Chinese Government has been tightening its control over society. While it has been suggested that the development of the Internet and other areas of information and communications technology (ICT) has made it difficult to control activities of the masses, it has been noted that rapidly developing ICT technologies are exploited for social control. Since 2014, China has enacted laws based on "a holistic view of national security" that covers not only external threats but also culture and society. Those laws include the Anti-

Spy Law enacted in November 2014 to enhance domestic counter-espionage arrangements, a new National Security Law in July 2015, an Anti-Terrorism Law in January 2016 to strengthen state control, the Law on Management of Domestic Activities of Overseas Non-governmental Organizations in January 2017 to enhance control on foreign non-governmental organizations (NGOs), and the National Intelligence Law in June 2017.

The "anti-corruption" movement following the launch of the Xi Jinping leadership has made inroads under the policy of cracking down on both "tigers" and "flies," targeting both dominant figures and junior officials. People including former prominent leaders of the Party and military have strictly been charged with "corruption." General Secretary Xi has stated that "corruption is the greatest threat our Party faces," indicating that the "anti-corruption" movement will continue.

Through these developments, the Party has demonstrated a growing willingness in recent years to further bolster the power base of General Secretary Xi in the CCP. For example, it decided at the 19th National Congress in October 2017 to incorporate "thoughts," namely the political philosophy, under the name of General Secretary Xi Jinping into the Party constitution as a guideline. This was the first time since President Mao Zedong that a leader had his name in a guideline before retirement. Moreover, at the first plenary session of the 13th National People's Congress held in March 2018, a resolution was adopted to revise the constitution and abolish term limits for China's president, which indicates that Xi Jinping is further consolidating power as president. In this situation, the "thoughts on strengthening the military," which aims to realize the world-class forces was proposed, and "Xi Jinping's thoughts on strengthening the military" was incorporated into the Party constitution at the 19th National Congress in 2017 to become thoughts for guiding the People's Liberation Army (PLA). The "thoughts on strengthening the military" is the theoretical pillar of defense and military reforms promoted by President Xi, and it includes the absolute leadership of the party over the military, strong military reforms by strengthening military capabilities, placing utmost importance on civil-military fusion, military promotion based on science and technology, and law-based military governance.

2 Military Affairs

1 General Situation

For more than 30 years, China has sustained high-level growth of its defense budget without transparency, engaging in broad, rapid improvement of its military power in qualitative and quantitative terms with focus on nuclear, missile, naval and air forces. In doing so, it has attached importance to strengthening its operational capabilities for steadily acquiring information superiority as a means of both enhancing operational capabilities throughout the Chinese military and gaining asymmetrical capabilities to effectively impede enemies with overall military superiority from exerting their strength. Specifically, China has been increasingly emphasizing endeavors to achieve dominance in new domains. For example, it has been rapidly expanding its capabilities in the cyber domain, enabling it to disrupt enemy communications networks, and in the field of electromagnetic spectrum, which offers the potential to render enemy radar and other equipment ineffective, thereby hampering their ability to exercise their military might. In addition, it continues to build capacity to make it possible to restrict enemies' use of space. Bolstering these capabilities will reinforce China's "Anti-Access/Area-Denial (A2/AD)" capabilities and lead to the establishment of operational capabilities further afield. China is also prioritizing efforts to increase practical joint operational capabilities through military modernization including reforms. Additionally, while implementing a policy of **civil-military fusion** across the board, with the aim of promoting two-way links between military and civilian resources in technology development and various other fields, China is striving to develop and acquire cutting-edge technologies that can be used for military purposes. Cutting-edge technologies that China seeks to

develop and acquire include game changing technologies that would dramatically change future warfare.

China's 2019 white paper, "China's National Defense in the New Era," released in July 2019, notes that "intelligent warfare is on the horizon," indicating that attention should be paid to Chinese forces' efforts to use artificial intelligence (AI) technology.

Along with efforts to reinforce its operational capabilities, China is engaging in unilateral and coercive attempts to change the status quo based on its own assertions incompatible with the existing international order, and has been expanding and intensifying its military activities in maritime and aerial domains, notably in the East China Sea. China, particularly regarding maritime issues where its interests conflict with others', continues to act in an assertive manner, which includes dangerous acts that could cause unintended contingencies. Additionally, China continues to demonstrate its willingness to realize its unilateral assertions without making any compromises, steadily moving forward with efforts to change the status quo by coercion and to create a fait accompli.

The Chinese military leadership has exhibited the "struggle" against the Senkaku Islands, an inherent territory of Japan, the establishment of the "East China Sea Air Defense Identification Zone (ADIZ),"¹ its Navy and Air Force's "regular patrols," and others as the achievements of the military forces' activities and emphasized to continue improving the Chinese military's operational capabilities. Furthermore, the Chinese military forces have rapidly expanded and intensified activities including those in the areas surrounding Japan, such as the East China Sea, Pacific Ocean and Sea of Japan. Given these facts, there is a high probability that China would not only attempt to make such activities



Key Words Anti-Access/Area-Denial (A2/AD) capabilities

The A2/AD capabilities represent a concept given by the United States. Anti-Access or A2 capabilities refer mainly to long-range capabilities to block adversaries from entering some operating zones. Area-Denial or AD capabilities refer to short-range capabilities to limit adversaries' freedom of action within operating zones.



Key Words Civil-military fusion

Civil-military fusion is an initiative promoted by China as a national strategy designed to promote the military use of civilian resources and the civilian use of military technologies in peacetime as well as emergency, in addition to the traditional development of defense mobilization arrangements for emergency. In particular, initiatives in seas, outer space, cyberspace, artificial intelligence (AI), which are referred to as "emerging areas" for China are viewed as priority areas for civil-military fusion.

¹ On November 23, 2013, China established the "East China Sea ADIZ" including the Senkaku Islands misleadingly indicated as if they were China's territory. China requires aircraft flying in the zone to abide by rules set by its Ministry of National Defense and claims to take military "defensive emergency measures" against aircraft failing to do so, unduly infringing on the principle of freedom of overflight. Over the move to unilaterally change the status quo in the East China Sea, not only Japan but also the United States, the ROK, Australia, and the European Union (EU) expressed concerns.

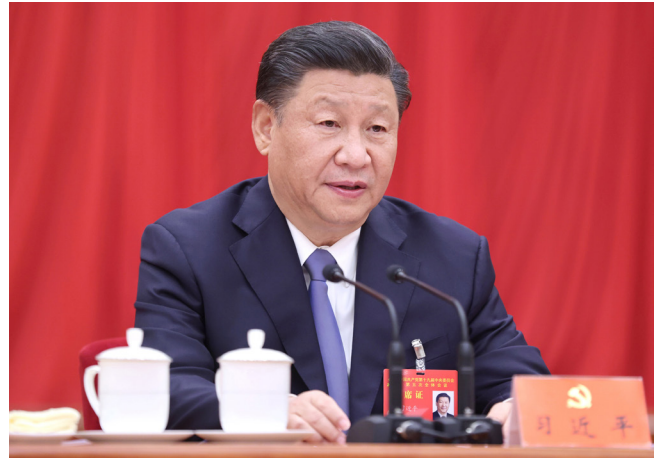
routine but also further expand and intensify them both qualitatively and quantitatively. Such Chinese military trends, combined with insufficient transparency about China's defense policies and military affairs, have become a matter of grave concern to the region including Japan and the international community and should continue to be closely monitored in the future.

2 Defense Policies

China has described the objectives of its defense policies and the missions of its military forces as: supporting the CCP's leadership, China's characteristic socialism system, and the modernization of its socialism, defending the nation's sovereignty, unification and security, backing the nation's sustainable "peaceful development" through protecting its maritime and overseas national interests, building strong national defense and massive military forces commensurate with the interests of the nation's security and the interests of development, and providing strong assurances for realizing the "Chinese dream" of the great revival of the Chinese nation. China contends that these national defense policies are "defensive" in nature.²

For the development of national defense and military forces, China has employed a policy of building the "system of modern military power with Chinese characteristics" by sustaining the military development under the party, the military buildup through reforms, military promotion based on science and technology, and law-based military governance, by pursuing practical capabilities that "can fight and win a war" by giving greater priority to the civil-military fusion, by promoting the fusion and development of mechanization and informatization, and by accelerating the intelligentization of military forces. This might have apparently deepened a policy of giving priority to the informatization of military forces based on a military strategy to win informatized local wars in response to the global trend of military development. Such military buildup in China apparently indicates that China has given top priority to dealing with a Taiwan contingency by improving its capabilities to deter or deny Taiwan's independence and foreign military support for the Taiwanese independence, and has recently considered the improvement of operational capabilities in more distant waters to protect its expanding overseas interests.

Furthermore, China seems to emphasize not only physical means but also non-physical means in military affairs and warfare. It regards the concept of "Three



General Secretary Xi Jinping attending the 5th Plenary Session of the 19th Central Committee of the Communist Party of China in October 2020 [China News Service/Jiji Press Photo]

Warfares" — "Media Warfare," "Psychological Warfare," and "Legal Warfare" — as part of the political work of the military. In addition, China has set forth a policy of coordinating military struggle closely with political, diplomatic, economic, cultural, and legal endeavors.

As for the future goals of the development of national defense and military forces, General Secretary Xi Jinping's report to the 19th CCP National Congress in October 2017 and the defense white paper released in 2019 noted that China would try to (1) basically achieve mechanization and make great progress in informatization to dramatically improve strategic capabilities by 2020, (2) basically complete the modernization of national defense and military forces by 2035, and (3) generally transform Chinese forces into world-class forces by the mid-21st century. These goals reportedly indicate that the third stage of the "Three Stage Development Strategy" for the basic modernization of national defense and military forces by the middle of the 21st century would be achieved 15 years ahead of schedule. The goals thus might have been based on faster-than-expected progress in the military modernization for China itself. In the 5th Plenary Session of the 19th Central Committee of the Communist Party of China in October 2020, China expressed its determination to achieve a struggle goal for the 100th anniversary of the foundation of the PLA in 2027. This goal could have been newly set as an interim goal up to the second stage with the deadline for achievement in 2035, following the near achievement of the goal of the first stage described above. However, China has recognized a wide gap between the real military modernization level and the level required for national security, and between Chinese and world-class

² According to the defense white paper "China's National Defense in the New Era" (July 2019)

military forces. Based on that recognition, China may further accelerate the military modernization against the backdrop of national power development and General Secretary Xi's enhancement of his power base in the CCP and expansion of his power as Chairman of the Central Military Commission.³

3 Transparency Concerning Defense Policies and Military Affairs

China has neither set out a clear and specific future vision of its military strengthening, nor ensured adequate transparency of its decision-making process in relation to military and security affairs. Moreover, China has not fully disclosed information such as specific weapons in possession, procurement goals and results, organization and locations of major units, records of main military operations and exercises, and a detailed breakdown of its national defense budget.

Incidents in which Chinese authorities provide factually inaccurate explanations or refuse to admit facts regarding Chinese military activities have been confirmed, inciting concerns over China's military decision-making and actions. For example, the submerged transit of a Chinese Navy submarine through Japan's contiguous zone around the Senkaku Islands was confirmed in January 2018, but China did not acknowledge this.

Similarly, explanations that stoke concerns about Chinese military decision-making and actions are also evident in comments about the South China Sea, where China is seeking to unilaterally change the status quo and to create a *fait accompli*. At the press conference after the U.S.-China summit meeting in September 2015, President Xi Jinping stated "China does not have any intention to pursue militarization" in the South China Sea, but in February the following year, Foreign Minister Wang Yi described the facilities in the South China Sea as "necessary self-defense facilities" that China was developing in accordance with international law. In 2017, reports in official media asserted that China had rationally expanded the area of its "islands and reefs" in the South China Sea to "strengthen the necessary military defense."

China has released a defense white paper almost every two years since 1998. Most recently, it released a defense white paper in July 2019 for the first time in approximately four years. The latest one was titled "China's National

Defense in the New Era." Although defense white papers released in 2013 and 2015 covered specific topics only, with the volume of descriptions reduced, the 2019 white paper covered defense policies in general.

China's influence in the international community has risen politically, economically, and militarily. It has become increasingly important for China to improve its transparency regarding defense policies and military affairs, provide fact-based explanations about its activities, and share and observe international rules as a responsible country in the international community to allay concerns about China. It is strongly hoped that China will increase transparency through such efforts as specific and accurate information disclosure.

4 National Defense Budget

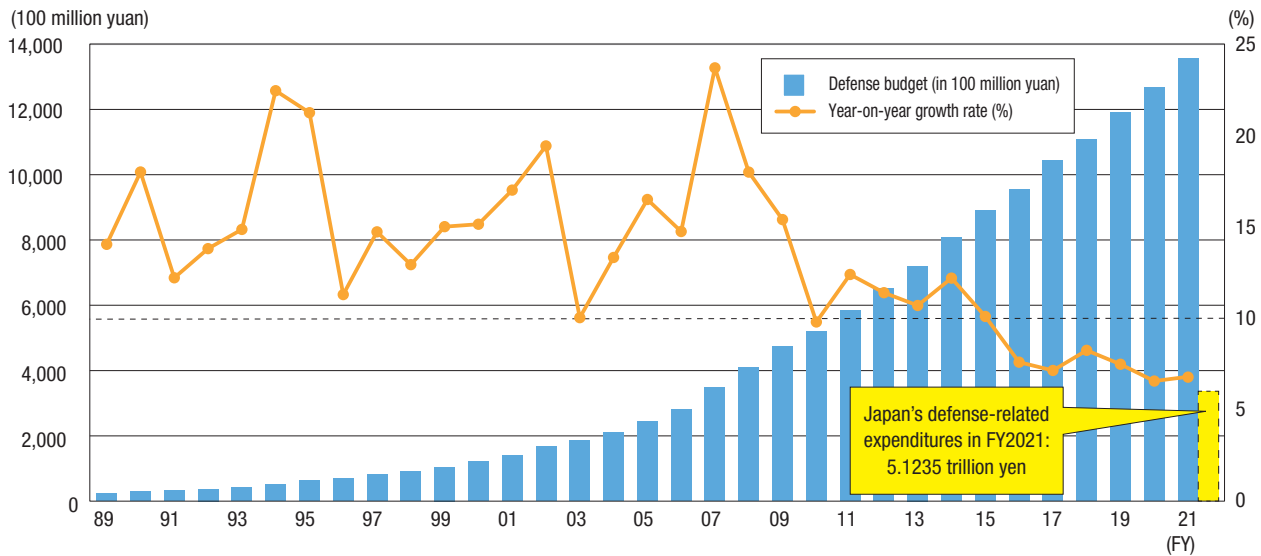
China announced that its national defense budget for FY2021 was approximately 3,553 billion yuan (approximately 20,330.1 billion Japanese yen when the value is mechanically converted at 15 yen per yuan).⁴ This initial budget amount represented a growth of approximately 6.8% (approximately 87.3 billion yuan) compared to the initial budget amount for the previous fiscal year. China's announced national defense budget recorded a double-digit increase almost every year between FY1989 and FY2015. The nominal size of China's announced national defense budget grew approximately 42-fold in the 30 years from FY1991 and approximately 2.3-fold in the 10 years from FY2011. China positions the buildup of defense capabilities as important a task as economic development. It is believed that China has continued to invest resources in the improvement of its defense capabilities in tandem with its economic development. However, there have been many years in which the announced annual national defense budget increase rate exceeded the economic growth (an increase in gross domestic product). Attention is to be paid to how the slowdown in China's economic growth would affect its national defense budget.

In addition, it is noted that the amount of the announced defense budget is considered to be only a part of its actual military expenditures. For example, it is believed that the announced defense budget does not include foreign equipment procurement costs or research and development (R&D) expenses. According to an analysis of the U.S. DoD, actual defense spending

³ The Central Military Commission is a leading and commanding organ to China's armed forces. Formally, there are the CCP CMC and the People's Republic of China CMC. However, each consists of the same members, indicating both commissions as an organ for the party to control the armed forces.

⁴ China's announced defense budget exceeded Japan's defense-related expenditures in Chinese FY2007 and reached approximately four times as much as in Chinese FY2020 (automatically converted based on exchange rates of respective fiscal years). Japan's defense-related expenditures have remained almost unchanged for around 20 years (approximately 1.2 times in 30 years).

Fig. I-2-2-1 Changes in China's Announced Defense Budget



Note: This basically shows the defense budget within “the central government’s general public budget,” which had been named as “the central fiscal expenditures” prior to FY2014. Year-on-year growth rate compares the budget of a given year against the initial budget of the previous year. Note that FY2002 defense budget was calculated based on the increased amount from the defense budget in the previous FY because only the amount and rate of growth were released. For FY2016, FY2018, FY2019, FY2020 and FY2021, the amount of “the central government expenditures,” which are part of the central government’s general public budget, are used because only the central government expenditures were announced.

in FY2019 was US\$26 billion more than the announced national defense budget amount.⁵

As for a breakdown of the national defense budget, past defense white papers specified personnel, training and sustainment, and equipment expenses for the announced national defense budgets for FY2007, FY2009 and FY2010-2017 (and expenses for active, reserve and militia forces for FY2007 and FY2009). However, no more details have been given.

See Fig. I-2-2-1 (Changes in China's Announced Defense Budget)

5 Military Posture

China’s armed forces are composed of the PLA, the People’s Armed Police Force (PAP), and the militia. It is provided that these bodies be instructed and commanded by the Central Military Commission (CMC). The PLA is defined as a people’s force created and led by the CCP, comprising the Army, the Navy, the Air Force, the Rocket Force, the Strategic Support Force, the Joint Logistics Support Force, etc.

The PAP is designed to engage mainly in patrol, emergency response, counterterrorism, maritime rights protection and law enforcement, emergency rescue, defense operations, etc. The militia is planned to engage in economic construction, etc., in peacetime and undertake logistic support missions in an emergency.

(1) Military Reforms

In recent years, China has been carrying out military reforms seen as the largest in its history. In November 2015, Chairman Xi unveiled China’s official position on a specific direction of the military reforms for the first time, announcing that the military reforms would be carried out by 2020.

By the end of 2016, the so-called “above-the-neck” reforms in the center of the military were reported to have basically been completed. Specifically, they abolished the PLA’s seven Military Regions and created five new Theaters with primary responsibility for command of operations, namely, the Eastern Theater, Southern Theater, Western Theater, Northern Theater, and Central Theater. In addition, they also formed the PLA Army (PLAA) Headquarters—ranked equally with the PLA Navy (PLAN) and PLA Air Force (PLAAF) Headquarters—the Rocket Force (PLARF), the Strategic Support Force (PLASSF), and the Joint Logistics Support Force. Moreover, the headquarters for the entire PLA were replaced by 15 functional sections under the CMC, including the Joint Staff Department, Political Work Department, Logistics Support Department, and Equipment Development Department. Since 2017, military reforms have been making steady progress with the start of what are called full-scale “below-the-neck” military reforms at the field level.

⁵ According to the annual report “Military and Security Developments Involving the People’s Republic of China,” U.S. DoD (2020)

For example, the expansion of the Navy Marine Corps, whose missions include amphibious landing operations, has been confirmed along with the unification of PAP leadership and command system under the CMC, and the reorganization of 18 Group Armies into 13, a reduction of 300,000 soldiers, the transfer of the coast guard to the PAP, etc.

It is considered that these series of reforms are designed to build more practical military forces by improving their joint operational capabilities and strengthening the military's readiness, including the development of military capabilities and organizational management in peacetime. In addition, it has been noted that the reorganization of the headquarters is a means of tackling corruption at the center of the military by decentralizing the leading organs. Since the 19th CCP National Congress in October 2017, many members seen as connected deeply to Chairman Xi have been appointed to the CMC. It has been noted that many officers trusted deeply by Chairman Xi have been promoted to senior positions and the rank of general. Given these points, it is thought that Chairman Xi is attempting to further enhance his leadership in the CMC and the military.

There are views that dissatisfaction is growing within the military and among veterans because of the rapid reforms. Given that China had promoted military reforms until 2020, the newly revised "National Defense Law of the People's Republic of China" (revised National Defense Law) was adopted at the 24th Session of the 13th Standing Committee of the China's National People's Congress in December 2020. In this law, protecting China's overseas interests, penetration of "Xi Jinping's thoughts on strengthening the military," and space, electromagnetic spectrum, and cyberspace as critical security areas, etc., were newly stipulated. It was assumed that China was aiming to create an impression that it had achieved major policy and system reforms by enacting the revised National Defense Law in 2020. Attention will focus on the outcome of these military reforms.

(2) Nuclear and Missile Forces

China has continued independent efforts to develop nuclear weapons and missiles for their delivery since the mid-1950s, indicating its apparent attempt to ensure nuclear deterrence, supplement its conventional forces with nuclear capabilities and secure its influence on the international community. It is regarded that China's nuclear strategy is to deter any nuclear attack on its territory by maintaining a nuclear force structure able to

conduct retaliatory nuclear attacks on a limited number of targets such as cities in adversary countries, should China be subject to nuclear attacks. China has explained that it is committed to "no first use" of nuclear weapons under any circumstances, to "unconditional negative security assurance" that it would not use or threaten to use nuclear weapons against non-nuclear-weapon states or nuclear-weapon-free zones unconditionally, and to keeping its nuclear capabilities at the minimum level required for national security. In recent years, however, doubts have been expressed about the explanation.⁶ Furthermore, the United States has been inviting China to participate in the New START Treaty (Strategic Arms Reduction Treaty), with the upper limit of strategic nuclear forces determined between the United States and Russia, but China has consistently been denying its participation.

China is viewed as having given priority to conventional missile capabilities since the 1990s because of the growing significance of precision-strike capabilities in the global military trend. In addition, China is promoting the expansion and modernization of nuclear forces, and it is expected that China will at least double the number of nuclear warheads in the next 10 years, and it is reportedly pursuing the so-called "nuclear triad."⁷ China is expected to continue to attach importance to its nuclear and missile forces.

China possesses ballistic missiles of various types and ranges, including ICBMs, SLBMs, intermediate-range ballistic missiles (IRBMs)/medium-range ballistic missiles (MRBMs), and short-range ballistic missiles (SRBMs). The update of China's ballistic missile forces from a liquid propellant system to a solid propellant system is improving their survivability and readiness. Moreover, it is believed that China is working to increase their performance by such means as extending ranges, improving targeting accuracy, and employing maneuverable reentry vehicles (MaRVs) and multiple independently targetable reentry vehicles (MIRVs).

China's main ICBMs, its strategic nuclear asset, had been the fixed-site liquid-propellant DF-5 missiles. However, China has in recent years deployed the DF-31, which is a mobile-type ICBM with a solid propellant system mounted onto a transporter erector launcher (TEL). China is developing the new DF-41 ICBM, which is viewed to be able to fly up to approximately 11,200 km and carry 10 warheads. It made its first appearance in the military parade to mark the 70th anniversary of the founding of the People's Republic of China in October 2019.

⁶ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2020)

⁷ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2020)

With regard to submarine-launched ballistic missiles (SLBM), it is considered that Jin-class Nuclear-Powered Ballistic Missile Submarines (SSBN) equipped with JL-2 SLBMs with an estimated range of approximately 8,000 km are operational. It is believed that China's strategic nuclear capabilities will improve significantly through nuclear deterrence patrols using the Jin-class SSBNs. Furthermore, it has been pointed out that China is also developing the JL-3 SLBM with the extended range of 12,000 to 14,000 km and a new SSBN for carrying the JL-3.

China's missile forces have been put outside the framework of the U.S.-Russia INF Treaty, and China holds numerous amounts of ground-launched missiles with ranges between 500 and 5,500 km that had been subjected to the INF treaty. It is also deemed that China is ahead of the United States in relation to ground-launched ballistic missiles and cruise missiles.⁸ As for the IRBMs/MRBMs covering the Indo-Pacific region including Japan, China has the mobile solid-propellant DF-21 and DF-26, which can be transported and operated on TELs. These are viewed as capable of carrying both conventional and nuclear warheads. China possesses ballistic missiles carrying conventional warheads with high targeting accuracy based on the DF-21, including the DF-21D anti-ship ballistic missile (ASBM), called "carrier killer," which carries conventional warheads to attack overwater ships including aircraft carriers. The DF-26, which has a range including Guam and is called "Guam killer," is considered a "second-generation ASBM" developed on the basis of the DF-21D. It was announced in April 2018 that the DF-21D had "formally joined the order of battle." China also possesses the CJ-20 (CJ-10) long-range land-attack cruise missile with a range of at least 1,500 km, as well as the H-6 bomber that is capable of carrying this cruise missile. It is deemed that these missiles complement ballistic missile forces, covering the Indo-Pacific region including Japan. In the military parade to celebrate the 70th anniversary of its founding in October 2019, CJ-100/DF-100, which is said to be a supersonic cruise missile, also made its first public appearance. The deployment of these ASBMs and cruise missiles is expected to strengthen China's "A2/AD" capabilities. Concerning SRBMs, China has deployed a large number of solid-propellant DF-16, DF-15, and DF-11 missiles facing Taiwan. It is believed that their ranges cover a part of Japan's Southwestern Islands including the Senkaku Islands.

Furthermore, China is believed to be rapidly

developing several HGVs that would be launched with ballistic missiles to penetrate missile defenses. Their flight tests have reportedly been conducted since 2014. In the military parade to mark the 70th anniversary of China's founding in October 2019, the DF-17 MRBM viewed as capable of carrying a hypersonic glide vehicle made its first public appearance. In August 2018, China is believed to have tested a hypersonic vehicle featuring the "waverider" design. These vehicles are said to be more difficult for missiles to intercept, because they fly low at very high speeds and are highly maneuverable.

China is also thought to be devoting energy to the

DF-41 ICBM

Specifications, performance

Maximum firing range: 11,200 km

Description

New intercontinental-range ballistic missile showcased for the first time at the military parade commemorating the 70th anniversary of China's founding in October 2019. Viewed as capable of carrying 10 multiple independently targetable reentry vehicles (MIRVs) and having attack capabilities with high accuracy.



[Imaginechina/Jiji Press Photo]

JL-2 SLBMs

Specifications, performance

Maximum firing range: 8,000 km

Description

Submarine-launched ballistic missiles (SLBMs) viewed as strategic nuclear forces of Chinese Navy. It is considered that China is developing JL-3 SLBMs (maximum range 12,000 km to 14,000 km) with extend ranges for further strengthening strategic nuclear forces.



[Avalon/Jiji Press Photo]

DF-17 MRBMs

Specifications, performance

Maximum firing range: 1,800 km - 2,500 km

Description

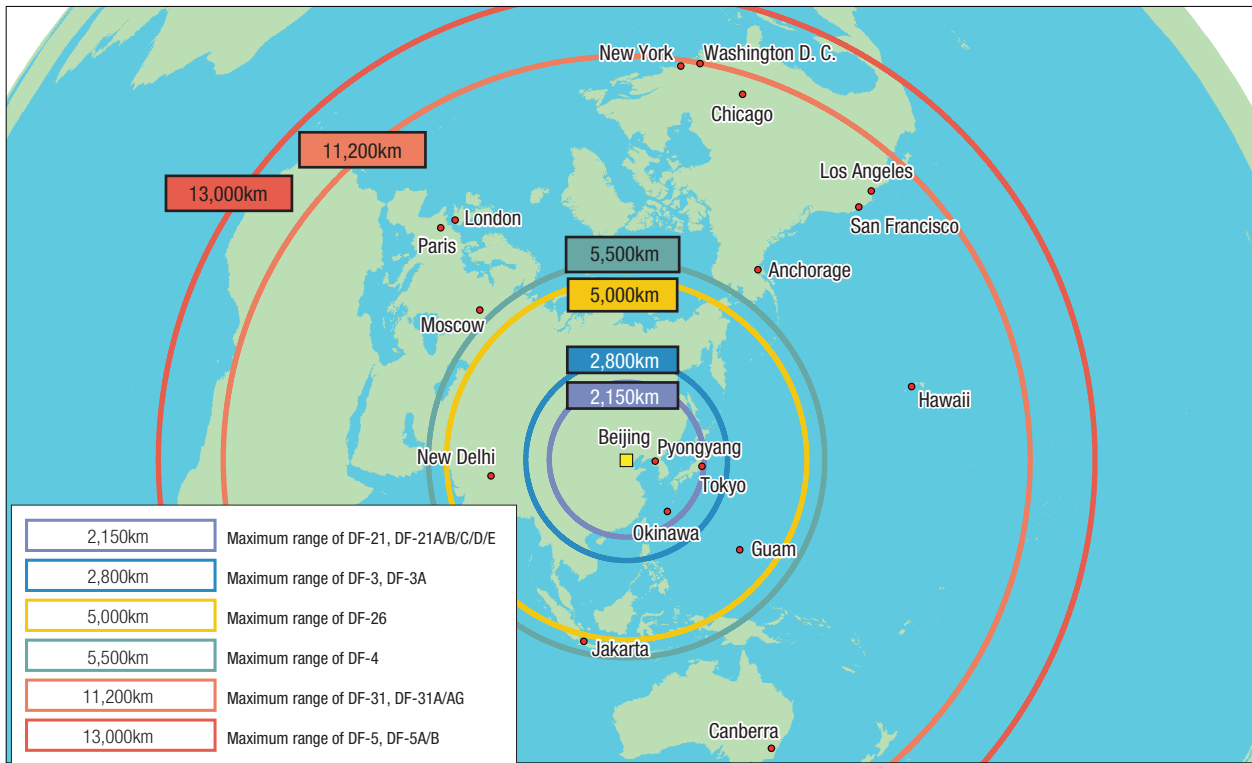
Medium-range ballistic missiles viewed as having been developed based on DF-16 SRBMs and as being capable of carrying a Hypersonic Glide Vehicle (HGV). Showcased for the first time at the military parade commemorating the 70th anniversary of China's founding in October 2019.



[Avalon/Jiji Press Photo]

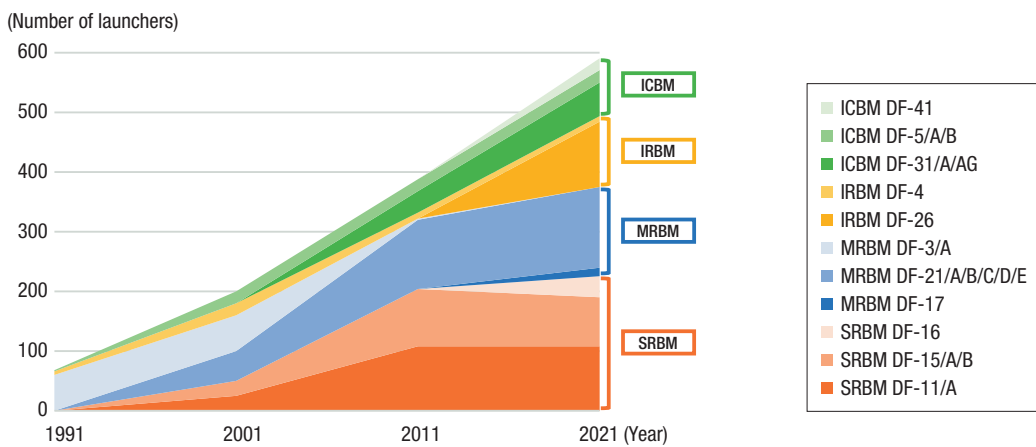
⁸ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2020)

Fig. I-2-2-2 Range of Ballistic Missiles from China (Beijing) (image)



Note : The figure above is for illustrative purpose, showing the range of each missile from Beijing.

Fig. I-2-2-3 Number of China's Ground-Launched Ballistic Missiles Fired in the Past



*The numbers of launchers, missiles, and warheads of ballistic missiles possessed by China are not publicized.
 *This data classifies the number of launchers possessed by China into ICBM, IRBM, MRBM, and SRBM according to the general standard based on "The Military Balance" of each year.

development of missile defense technology. It is believed to have conducted several tests on midcourse missile interception technology since 2010, and the most recent test was conducted in February 2021. In October 2019, Russian President Putin noted that Russia was supporting China's development of "a missile-attack early warning system." China has been working on building ballistic missile defense systems including interception missiles and warning systems. Given that ballistic missile defense

technology has the potential to be applied to missiles capable of destroying satellites, attention will focus on future Chinese missile defense trends.

See Fig. I-2-2-2 (Range of Ballistic Missiles from China [Beijing] [image])
 Fig. I-2-2-3 (Number of China's Ground-Launched Ballistic Missiles Fired in the Past)

(3) Ground Forces

China has the third largest ground forces in the world, following India and North Korea, with approximately 970,000 personnel. China has sought to improve the operational capabilities of ground forces pursuing the downsizing, multifunctionality, and modularization of military units. Specifically, it is believed to be improving ground forces' mobility using measures such as shifting from theater defense to trans-theater mobility and working to motorize and mechanize infantry units. According to some analyses, the Navy Marine Corps continues to complete its expansion and focus on expeditionary operations, while others discuss that, overall, reform and modernization of the Navy Marine Corps are delayed.⁹


China has annually conducted Stride, Firepower, and Sharp Sword maneuver-exercises that cut across multiple regions. They are aiming at verifying and improving the capabilities necessary to deploy army troops to remote areas, such as long-distance maneuvering capabilities of the Army, and logistical support capabilities that include mobilizing militias and public transportation. China has also conducted combined military branch and service exercises under Joint Action since 2014. Furthermore, it has been reported that force-on-force training has been frequently conducted to improve practical operational capabilities. These facts suggest China's attempt to improve its practical joint operational capabilities.

The above described PAP consists of internal security corps, which are organized and established based on administrative divisions such as provinces and autonomous regions, mobile corps, which do not have fixed areas in charge and perform missions across different areas, and the Coast Guard, described later, which is said to safeguard national sovereignty, security,



Unmanned underwater vehicles exhibited at the 70th anniversary of China's founding (October 2019) [Avalon/Jiji Press Photo]

and maritime interests as well as implements law enforcement. The PAP is said to own various equipment such as armored vehicles, rotary-wing aircraft, and heavy machine guns. Furthermore, it is reported that the PAP focuses on maintaining internal security and joint operations with the PLA, and is developing capabilities for readiness, mobility and counter-terrorism operations.¹⁰

 See Fig. I-2-2-4 (Deployment of the People's Liberation Army [image])

(4) Naval Forces

The naval forces consist of three fleets: North Sea Fleet, East Sea Fleet, and South Sea Fleet. China's naval forces, which own a larger scale of ships exceeding the U.S. Navy and are said to be the largest navy in the world,¹¹ are rapidly modernizing. The Chinese Navy promotes the mass production of its indigenous Yuan-class submarines with improved quietness, as well as surface combatant ships with improved air defense and anti-ship attack capabilities. In January 2020, the Navy commissioned the first Renhai-class destroyer among its largest destroyers, and the second destroyer was commissioned in March 2021. The Renhai-class destroyer is said to be equipped with a vertical launch system (VLS) with 112 launch cells, almost twice the number of launch cells as the new Luyang III-class destroyer. The VLS is capable of launching long-range land-attack cruise missiles and YJ-18 anti-ship cruise missiles with a supersonic terminal attack capability. In addition, the Navy is increasing the number of large landing ships and supply ships. Since September 2019, Type-075 large landing ships have been launched in sequence, and "Hainan," which is believed to be the first ship, commissioned in April 2021. Since September 2017, Fuyu-class fast combat support ships (comprehensive supply ships) have been in operation for replenishment for the aircraft carrier group. It has also been pointed out that China is developing new submarines capable of carrying land-attack cruise missiles.

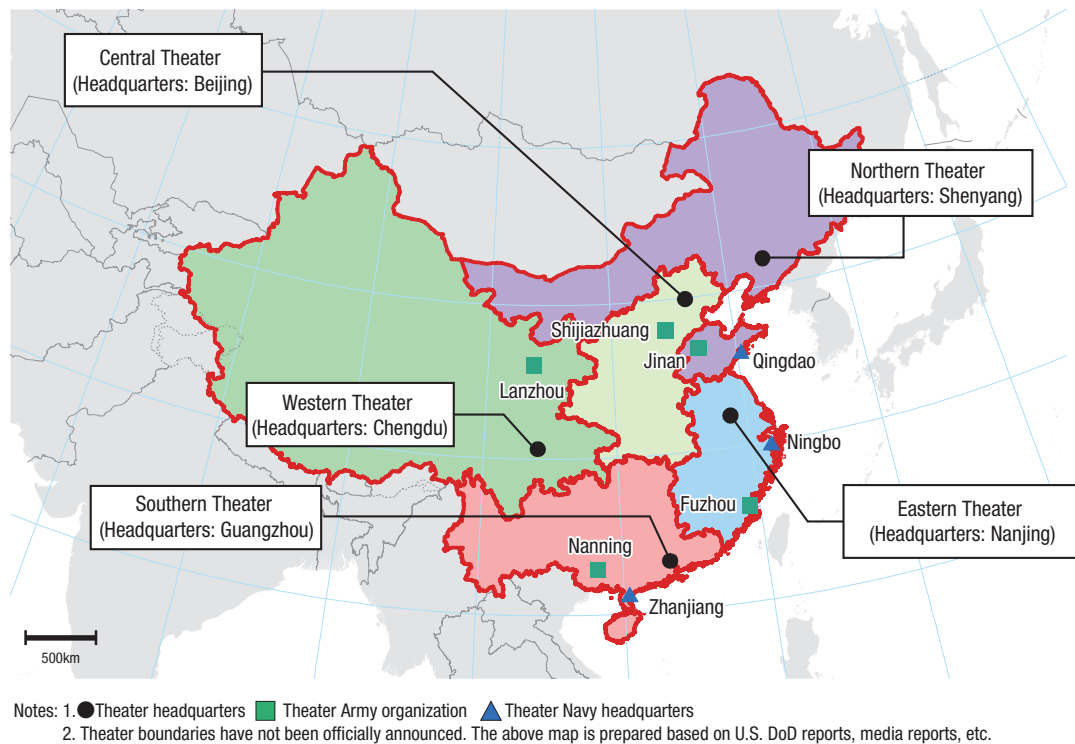
With regard to aircraft carriers, China's first aircraft carrier "Liaoning," following its commission in September 2012, reportedly made its first advance to the South China Sea in November 2013 and to the Pacific Ocean in December 2016. In the same month of 2016, the "Liaoning" conducted its first comprehensive live action, including live firing by carrier-based fighters, in the Bohai Sea. It was announced that the "Liaoning" participated in a naval review in the South China Sea and advanced to the Pacific Ocean for force-on-force training including carrier-based fighters from March to April 2018. China's first indigenous aircraft carrier (its

⁹ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2020)

¹⁰ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2020)

¹¹ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2020)

Fig. I-2-2-4 Deployment of the People's Liberation Army (image)



second carrier) was launched in April 2017, and then it was named “Shandong” and commissioned in Sanya of Hainan Island in December 2019. It is believed that the “Shandong” passed through the Taiwan Strait in December 2020. The “Shandong,” with a ski-jump flight deck, is an improved version of the “Liaoning,” reportedly carrying a greater number of aircraft than the “Liaoning.” China is reportedly building its second indigenous aircraft carrier, which could be equipped with an electromagnetic catapult system to operate fixed-wing early warning aircraft. It has also been pointed out that China has plans to build nuclear-powered aircraft carriers.

China is believed to have been developing and deploying unmanned surface vehicles (USVs) and unmanned underwater vehicles (UUVs) that are available for military purposes. Such equipment, though being relatively cheap, are viewed as representing an asymmetric force to effectively prevent adversaries from winning maritime supremacy, particularly underwater supremacy.

Given these developments concerning the naval forces, China appears to be steadily building up capabilities for conducting operations in more distant waters in addition to near sea defense.

The PAP, one of the China’s armed forces other than the military, has the Coast Guard under its umbrella, one of whose missions is the protection of maritime interests.

The Coast Guard consists of three groups: North, East and South Sea Sub-bureaus. Chinese government ships belonging to the Coast Guard have recently been designed to be larger and armed. At the end of December 2020, the China Coast Guard was viewed as one of possessing 131 ships with full displacement of 1,000 tons or more,¹² including two 10,000-ton-class patrol ships, among the world’s largest ones. Some China Coast Guard vessels have been confirmed as armed with 76 mm large guns that may be as powerful as the Navy vessels. The newer ships are significantly larger and more capable than older ships, and are said to be equipped with helicopter facilities, high-capacity water cannons, and guns ranging

Aircraft carrier “Shandong”

Specifications, performance

Full-load displacement: 66,000 tons
Speed: 30 knots (approximately 56 km/h) On-board aircraft: 36 J-15 fighters

Description

China’s first indigenous ski-jump flight deck carrier, an improved version of the Liaoning. Commissioned in Sanya of Hainan Island facing the South China Sea in December 2019.



[Avalon/Jiji Press Photo]

¹² According to “Japan Coast Guard Annual Report 2021,” Japan Coast Guard Defense



A 10,000-ton class Coast Guard vessel, the largest of its kind in the world
[provided by the Japan Coast Guard]

30mm to 76mm, so that they are viewed as being able to withstand long-term operations and engage in distant-water activities.¹³

The organizational enhancement of the Coast Guard has also been confirmed. China's maritime surveillance had been conducted by the China Coast Guard Bureau under control of the State Council's Ministry of Public Security, as a unified body consisting of the China Marine Surveillance (Haijian) of the State Oceanic Administration under the Ministry of Natural Resources, the China Fisheries Law Enforcement Command (Yuzheng) of the Fisheries Management Bureau under the Ministry of Agriculture, the Maritime Anti-Smuggling Force of the General Administration of Customs, etc. In July 2018, the Coast Guard was transferred to the PAP under unified control and command of the CMC and renamed PAP Coast Guard. After the transfer, former naval officers were reportedly given major Coast Guard posts, indicating enhanced cooperation between the military and Coast Guard. It has been noted that retired naval destroyers and frigates were delivered to the Coast Guard, suggesting that the military has been supporting the Coast Guard in terms of equipment as well as personnel.

At a ceremony to give the PAP a flag in January 2018, Chairman Xi stated that the PAP would be incorporated into the military forces' joint operations system. It has been pointed out that the military forces and the Coast Guard have conducted joint exercises. The military forces and the PAP including the Coast Guard are believed to be attempting to steadily strengthen their joint operational capabilities through the enhancement of cooperation. Given these trends, progress in cooperation between the Coast Guard and the Navy and between the Coast Guard and military services other than the Navy should be watched closely.

Amid such a situation, in June 2020, "Law of the People's Republic of China in the People's Armed Police

Force (PAP Law) was revised, and "protection of maritime interests and law enforcement" were added to the duties of the PAP. The revised version also stipulates that the PAP shall be centrally and uniformly guided by the Central Committee and the CMC of the People's Republic of China. In the revision of this law, the duty of "protection of the maritime interests and law enforcement" was supposed to be stipulated separately by law. However, the Coast Guard Law of the People's Republic of China (Coast Guard Law), which stipulates the Coast Guard's responsibilities and authority including the use of weapons, was newly enacted in January 2021 and entered into force in February 2021. A Spokesperson of the Chinese Ministry of Foreign Affairs explains that the establishment of the CCG Law is merely a normal legislative activity of the National People's Congress and that China's maritime policy has not changed. However, the Coast Guard Law includes problematic provisions in terms of their inconsistency with international law. Sources of inconsistency include, among others, ambiguity as to geographical areas the Coast Guard Law applies and how the rules governing the use of weapons are implemented. The Coast Guard Law must not be allowed to infringe on the legitimate interests of the relevant countries including Japan. Furthermore, the raising of tensions in the East China Sea and other sea areas is completely unacceptable. The United States and some neighboring countries have expressed concerns about the law. In order to allay other countries' concerns regarding China, it is strongly hoped that China will improve transparency through specific and accurate outward-facing explanations in the future.

It is pointed out that, among the militia, whose status is China's armed force other than the military, the so-called maritime militia is playing the role of the front guard for supporting China's maritime interests. The maritime militia is said to operate in the South China Sea, etc. and consist of fishermen and residents of isolated islands. In 2009, when Chinese naval and other ships intercepted the Impeccable, a U.S. Navy ocean surveillance ship, maritime militia members were reportedly seen aboard a fishing boat that was trying to remove a sonar from the U.S. ship. In 2019, when Chinese maritime survey ships were operating in Vietnam's exclusive economic zone, maritime militia ships were reportedly seen along with China Coast Guard vessels. In addition, it is pointed out that while the maritime militia often rents fishing vessels from companies or individual fishermen, China has built a state-owned fishing fleet in the South China Sea for the maritime militia. It is also pointed out that the Hainan

¹³ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2020)

Recent Organizational and Institutional Reforms in China – A Focus on Development of Laws including the Coast Guard Law

China has promoted various organizational and institutional reforms in recent years, including to its military. It is believed that China is aiming to build a more practical military and improve practical joint operational capabilities. China has a goal of transforming Chinese forces into world-class forces by the middle of this century. The changes are believed to have been advanced to increase President Xi's control over the Central Military Commission, and thus the military.

As part of these organizational and institutional reforms, China has also implemented various legal reforms. In particular, the “Law of the People's Republic of China in the People's Armed Police Force (PAP Law)” was revised in June 2020, the “National Defense Law of the People's Republic of China (National Defense Law)” was revised in December 2020, and the “Coast Guard Law of the People's Republic of China (CCG Law)” was newly established in January 2021. These are seen as a legal endorsement for a series of the reforms. For example, at the end of 2015, the Strategic Support Force was established. The force is believed to be in charge of outer space, cyberspace, and electronic warfare missions. The revised National Defense Law includes not only Chinese territorial land, waters, and airspace as defense domains but also outer space, the electromagnetic spectrum, and cyberspace as new “critical security areas.” In addition to sovereignty and territory, the law also adds “development interests” as a target for defense. If these interests are threatened, national defense can be mobilized. This change indicates an expanding sphere of activity for the Chinese military.

In this series of legislative developments, the CCG Law, along with other laws concerning China Coast Guard, have attracted a great deal of interest in China and abroad because of their contents.

Specifically, in 2018, following the transfer of the China Coast Guard to the PAP under unified control and command of the Central Military Commission (CMC), the revised PAP Law added “protection of the maritime interests and law enforcement” to the duties of the PAP, and the revised law stipulates that the PAP shall be centrally and uniformly guided by the Central Committee and the CMC of the People's Republic of China.

In addition, the newly established CCG Law stipulates that “protection of the maritime interests and law enforcement activities shall be deployed with this law applying to the activities” in China's “maritime areas under Chinese jurisdiction and the airspace above them,” but the scope of these “maritime areas under Chinese jurisdiction” is not clearly indicated. The UN Convention on the Law of the Sea stipulates the rights of coastal states recognized in each sea area, such as internal waters, territorial waters, contiguous zones, exclusive economic

zones, and continental shelves. If China were to enforce the CCG Law on areas over which the UN Convention does not recognize its sovereignty, sovereign rights, or jurisdiction, it would be in violation of international law.

Furthermore, the law states that coast guard organizations “shall have the right to take vigilance and control measures to stop infringements by foreign military vessels and foreign government vessels used for non-commercial purposes, and to order them to leave the relevant waters immediately,” and “shall have the right to order vessels who refuse to leave and are causing substantial harm or creating a substantial threat to immediately leave, forcibly make them leave, or forcibly separate them, etc.” It also stipulates the right to “take all necessary measures, including the use of weapons” in cases where “the sovereignty, sovereign rights, and jurisdiction are illegally infringed by foreign organizations and individuals at sea.”

The CCG is under the control of the PAP, defined as one of China's “armed forces,” along with the People's Liberation Army (PLA) and the Militia. Its relationship with the PLA has attracted much attention. According to China's 2019 white paper, “the PAP are not part of the ranks of the PLA,” and a clear distinction is made between the PAP and the military. Additionally, a spokesperson of the Chinese Ministry of Foreign Affairs has explained that the establishment of the CCG Law is to ensure a legal basis for law enforcement and is merely a normal legislative activity of the National People's Congress and that China's maritime policy has not changed. However, as mentioned above, the CCG Law includes problematic provisions in terms of their inconsistency with international law. Sources of inconsistency include, among others, ambiguity as to geographical areas the CCG Law applies and how the rules governing the use of weapons are implemented, as well as provisions that state that the CCG is “to fulfill duties such as defense operations” in addition to “law enforcement activities.”

As China has continued and strengthened its unilateral attempts to change the status quo in the East China Sea and South China Sea, the CCG Law must not be allowed to infringe on the legitimate interests of the relevant countries including Japan. Furthermore, the raising of tensions in the East China Sea, South China Sea and other sea areas is completely unacceptable. Japan has conveyed its grave concerns to the Chinese side.

Amidst this situation, a spokesperson of the Ministry of Foreign Affairs in neighboring Vietnam, when asked about the CCG Law, commented that Vietnam urges relevant countries to respect Vietnam's sovereignty, sovereign rights, and jurisdiction in the South China Sea, to responsibly and sincerely implement international law and the UN Convention on the Law of the

Sea, and to avoid actions that increase tensions. The Philippine Foreign Minister also announced that the country had made a diplomatic protest regarding the CCG Law. In addition, the United States has also expressed its concern about the CCG Law, with the spokesperson of the Department of State issuing comments. At the Japan-U.S. Security Consultative Committee (Japan-U.S. “2+2”) held in March 2021, both countries expressed their opposition to any unilateral actions that seek to change the status quo, including in the East and South China Seas, as well as their serious concerns about the CCG Law.

In order to allay other countries’ concerns regarding China, it is strongly hoped that China will increase transparency through specific and accurate outward-facing explanations in the future. Japan, too, needs to keep a close eye on trends in China’s organizational and institutional

reforms, including the development of the aforementioned series of laws and operations.



January 2018: Flag Ceremony for the People's Armed Police Force [Avalon/ Jiji Press Photo]

provincial government, adjacent to the South China Sea, ordered the building of 84 large militia fishing vessels with reinforced hulls and ammunition storage, which the militia received by the end of 2016, along with extensive subsidies to encourage frequent operations in the Spratly Islands. Since this maritime militia unit recruits military veterans as its members to create a unit on par with a career soldier unit, it is reported that salary is paid separately from its commercial fishing activities.¹⁴

Given the China’s emphasis on the necessity of “fully exerting the overall power of the military, police and militia” on the seas, attention should be paid to these asymmetrical forces, too.

Fig. I-2-2-5 (The Coast Guard’s Transfer to the PAP)

(5) Air Forces

China’s air forces consist mainly of the Navy’s air units and the Air Force. As for fourth-generation fighters, China has introduced from Russia the Su-27 and Su-30 and the Su-35 latest fourth-generation fighter. China is also developing its own domestic modern fighters. China has started the mass production of the J-11B fighter, a suspected copy of the Su-27, and the J-16 fighter, a suspected copy of the Su-30, as well as the domestic J-10 fighter. The J-15 fighter aboard the aircraft carrier “Liaoning” is viewed as a copy of the Russian Su-33. China has also reportedly begun to deploy the **J-20** fifth-generation fighter and been developing the J-31. It has been pointed out that the J-31 fighter could be the base for developing the replacement for the J-15 carrier-based fighter.

As China is continuing the modernization of its bombers as well, the Air Force has increased the number of **H-6 bombers**, which are believed to be capable of carrying long-range land-attack cruise missiles with nuclear capability. In an attempt to improve bombers’ long-range operation capabilities, the Air Force has reportedly begun to operate H-6N bombers that can take advantage of aerial refueling to fly longer. It is believed to be developing a new long-range stealth bomber called

J-20 fighter

Specifications, performance
Maximum speed: 3,063 km/h

Description
A fifth-generation stealth fighter jet. The Chinese Ministry of National Defense announced in February 2018 that the J-20 has started to be delivered to operational units.




[Imaginechina/Jiji Press Photo]

H-6 bomber

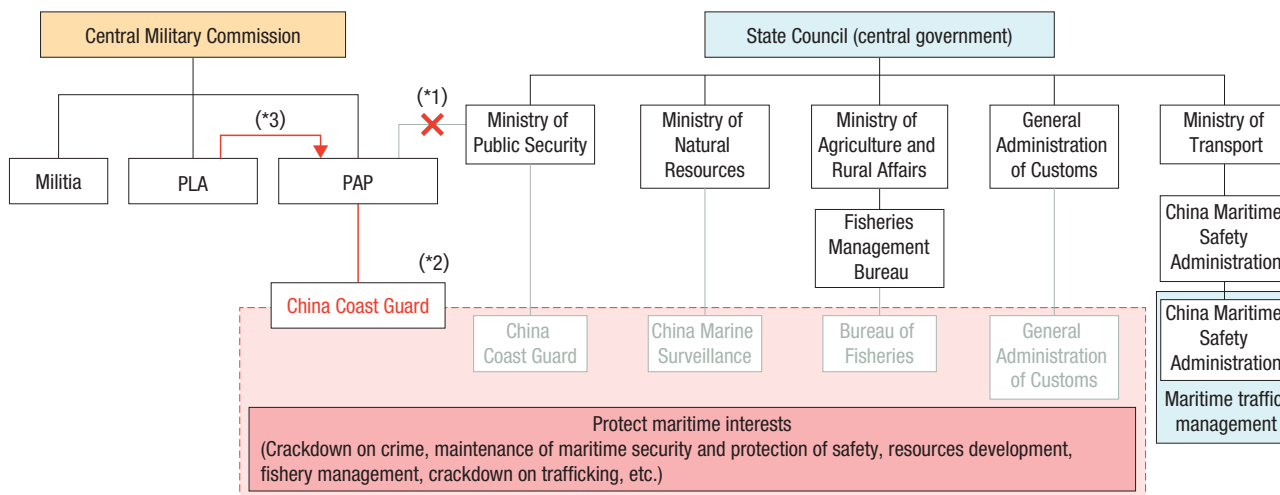
Specifications, performance
Maximum speed: 1,015 km/h Main armament (H-6K): Air-to-surface cruise missiles (maximum firing range 1,500 km)

Description
Indigenous bomber. The H-6 can carry cruise missiles (CJ-20) that can be loaded with nuclear warheads.



¹⁴ According to the annual report “Military and Security Developments Involving the People’s Republic of China,” U.S. DoD (2020)

Fig. I-2-2-5 The Coast Guard's Transfer to the PAP



*1 Unification of PAP leadership and command system (January 1, 2018)

*2 Transfer of the Coast Guard to the PAP (July 1, 2018)

*3 The amendment to the People's Armed Police Law (June 21, 2020)

→In emergency situations, the Central Military Commission, or else the military of the Theater Commands, can issue orders to the divisions of the People's Armed Police Force (PAP).

(Reference)

The scope of the China Coast Guard that is transferred to the PAP and placed under its command is unknown.

Units enclosed by a red dotted line belonged to the China Coast Guard before the realignment (2013).



GJ-11 UAV exhibited at the military parade commemorating the 70th anniversary of China's founding (October 2019) [Avalon/Jiji Press Photo]

H-20. It is also pointed out that China is developing an air-launched ballistic missile with nuclear capability to be carried by such bombers, and a stealth fighter bomber.

China is also making continuous efforts to improve capabilities which are essential for operations of modern air power by introducing the H-6U and IL-78M aerial refueling tankers and the KJ-500 and KJ-2000 early warning and control aircraft. Since July 2016, China has promoted the deployment of the indigenously developed Y-20 large transport aircraft, which has reportedly become a base for developing aerial refueling tankers and other mission support aircraft.

China is rapidly developing a variety of domestic unmanned aerial vehicles (UAVs), including high-altitude, long-endurance (HALE) UAVs for reconnaissance and other purposes as well as those capable of carrying weapons such as missiles. Some of these are deployed and

actively exported. In fact, it is suggested that the Chinese Air Force has created a UAV unit for attack missions and frequently used UAVs for reconnaissance and other purposes in waters and airspace surrounding China. At the military parade to celebrate the 70th anniversary of China's founding in October 2019, the GJ-11 known as a stealth attack UAV and the WZ-8 claimed to be a high-altitude, high-speed reconnaissance UAV were displayed for the first time. It has been noted that China is improving "Swarm" technology to operate a large number of small low-cost UAVs.

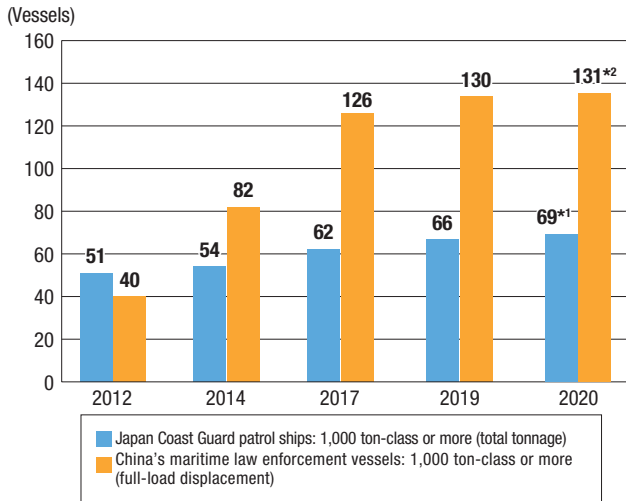
Given such modernization of the air forces, it is believed that China is steadily improving not only its defense capabilities for its national airspace but also capabilities for conducting combat operations, and supporting ground and maritime forces in more distant areas.

 See Fig. I-2-2-6 (Buildup of China Coast Guard Vessels)
Fig. I-2-2-7 (Major Chinese Navy and Air Forces)

(6) Space, Cyber, and Electromagnetic Spectrum Capabilities

Information gathering, and command and communication in the military sector have increasingly relied on satellites and computer networks. As such, China stated that "outer space and cyberspace have become new commanding heights (capture point) in strategic competition among all parties," indicating that it has recognized the importance of taking on information mastery in wartime when it must protect its own information systems and networks while neutralizing those of its adversaries. In fact, the PLASSF established

Fig. I-2-2-6 Buildup of China Coast Guard Vessels



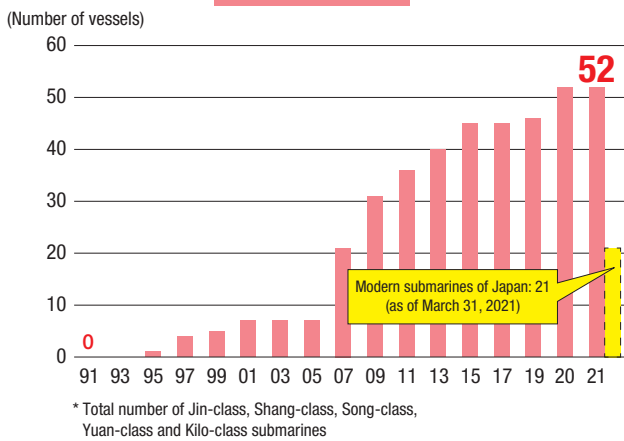
*1 Number of ships as of the end of FY2020
 *2 Number of vessels as of the end of December 2020; Estimation based on publicized information (may be altered in the future)
 *According to "Japan Coast Guard Annual Report 2021," Japan Coast Guard

at the end of 2015 apparently takes charge of outer space, cyberspace, and electronic warfare missions for intelligence support for all military forces.

In its white paper titled "China's Space Activities" and released in December 2016, China does not rule out its use of outer space for military purposes. Given that administrative organizations and state-owned enterprises involved in the use of outer space in China are pointed out as having close cooperative ties with the military, it is considered that China is planning to improve its capabilities for military operations in outer space.¹⁵ China is said to have developed its space program in the shortest time in the world. Specifically, China has rapidly increased the number of satellites available for military purposes in recent years. For example, the "BeiDou" global satellite positioning system, which is called a Chinese-version GPS and pointed out as available for ballistic missiles and other guided weapons systems, started its global operation service in late 2018, and it

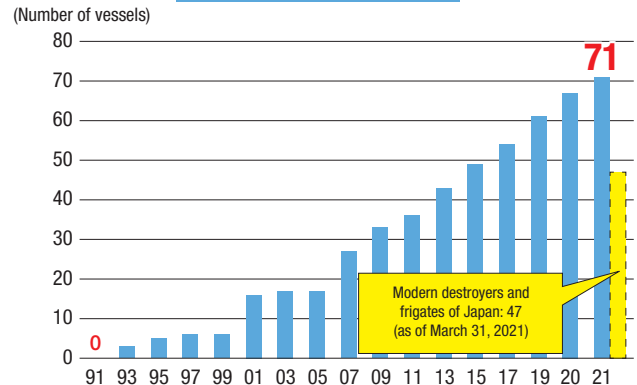
Fig. I-2-2-7 Major Chinese Navy and Air Forces

Modern submarines



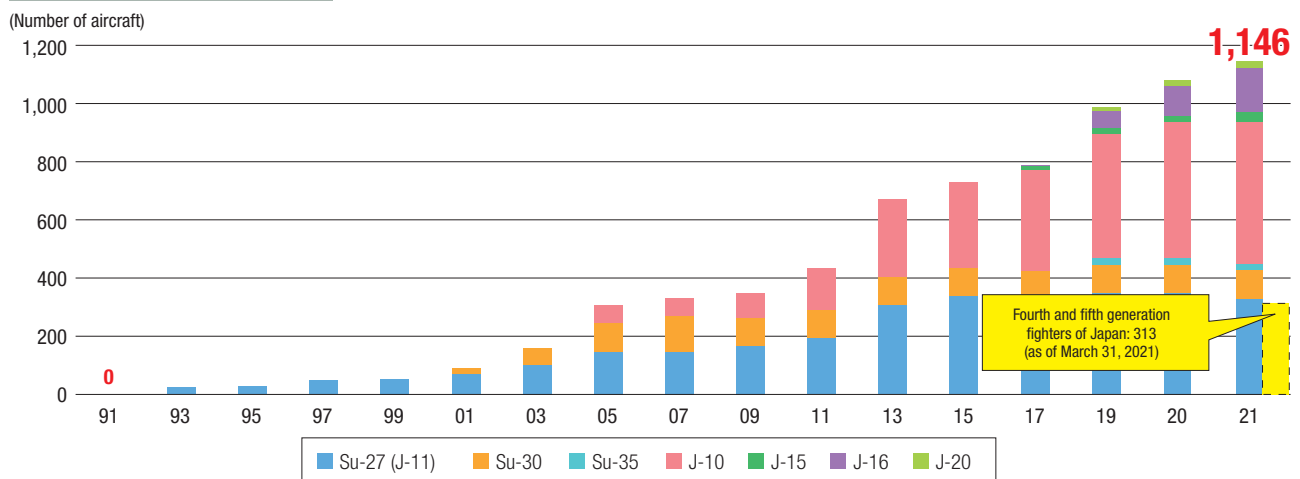
* Total number of Jin-class, Shang-class, Song-class, Yuan-class and Kilo-class submarines

Modern destroyers and frigates



*1 Total number of Renhai-class, Luhu-class, Luhai-class, Sovremenny-class, Luyang-class and Luzhou-class destroyers, and Jiangwei-class and Jiangkai-class frigates
 *2 Additionally, China also has 50 Jiangdao-class corvettes (2021).

Fourth and fifth generation fighters



¹⁵ According to "The Worldwide Threat Assessment," the U.S. Director of National Intelligence (2019)

is deemed that the launch of all satellites constituting the BeiDou system was completed in June 2020. Moreover, China is thought to be developing weapons including anti-satellite weapons using missiles and laser equipment, as well as killer satellites, in order to restrict and interfere with the use of space-based assets by adversaries in wartime.¹⁶

As for the cyber domain, China sees cybersecurity as a serious national security threat it faces and vows that China's armed forces will build cyber defense capabilities, reinforce national cyber border defense, immediately find and block crackers, secure information network security, and unshakably protect national cyber sovereignty, information security, and social stability.¹⁷ It has been noted that current major military exercises always contain cyber operations covering both attacks on and defense of command systems. Cyber attacks on enemy networks are likely to bolster China's "A2/AD" capabilities. The militia as a part of China's armed forces reportedly includes "cyber militias" with excellent cyber domain capabilities.

It has also been pointed out that the Chinese military routinely conducts various force-on-force exercises in an electronic warfare environment. In addition, the presence of aircraft with electronic warfare capabilities has been noted. Y-8 electronic warfare aircraft, which frequently fly near Japan, are pointed out along with J-15 carrier-based fighters, J-16 fighters and H-6 bombers that appear to be equipped with electronic warfare pod systems giving them electronic warfare capabilities.

(7) Efforts to Develop Joint Operational Capabilities

In recent years, initiatives have been under way to improve joint operational capabilities in areas from the front line to logistics. The CMC Joint Operations Command Center is believed to have been established under the initiatives for the CCP to carry out decision making at the highest strategic level. The five new theaters established in February 2016 are seen as representing permanent joint operation headquarters. Given that the Navy's Vice-Admiral Yuan Yubai became the first non-Army theater commander in January 2017, it is assumed that progress is being made towards joint operations in the area of human resources. In recent years, China has implemented tri-service joint exercises giving priority to practicality and other drills to improve its joint operational capabilities. These drills are apparently designed to secure the effectiveness of the abovementioned organizational reforms and other initiatives to improve joint operational capabilities. In response to the novel coronavirus disease,

which emerged in China from late 2019, China has reportedly implemented not only joint military operations but also the mobilization of civil resources. The Joint Logistics Support Force specialized in logistics has played a core military role in the response while receiving support from each theater and service. In addition, militias and national-defense-mobilized personnel have also reportedly participated in the response, which has attracted attention as a case indicating comprehensive joint logistic support capabilities.

At the 19th CCP National Congress in October 2017, General Secretary Xi reiterated enhancing joint operational capabilities and the pursuit of practical capabilities of a military that "can fight and win a war." More recently, at a CMC meeting on military training in November 2020, General Secretary Xi also stated that the strengthening and developing of joint training and the enhancement of joint operational capabilities need to be accelerated. Given these remarks, the abovementioned moves towards joint operations are expected to progress further.

6 Maritime and Airspace Activities

(1) General Situation

Recently, China is believed to be aiming to build up capabilities for operations in more distant waters and airspace, including those to project power to waters including the so-called second island chain, beyond the first island chain. In such efforts, China has rapidly expanded and intensified its activities in the maritime and aerial domains using its naval and air powers. In waters and airspace surrounding Japan, particularly, Chinese naval vessels, and naval and air force aircraft suspected as conducting training and information gathering activities have been observed frequently, along with Chinese naval ships heading for the Pacific and Indian Ocean and numerous China Coast Guard vessels and aircraft operating under the name of protecting maritime interests. Their activities include China Coast Guard vessels' intermittent intrusions into Japan's territorial waters, Chinese aircraft's intrusions into Japan's airspace, and dangerous acts that could cause unintended consequences, such as the directing of fire-control radar at Japanese Self-Defense Forces (SDF) ships and aircraft, Chinese military fighter jets' abnormally close approach to Japanese SDF and U.S. military aircraft, and the establishment of the "East China Sea ADIZ" and other activities that could infringe upon the freedom of overflight. These activities have become a grave matter

¹⁶ According to "The Worldwide Threat Assessment," the U.S. Director of National Intelligence (2019)

¹⁷ According to the defense white paper "China's National Defense in the New Era" (July 2019)

of concern and are very deplorable. In the South China Sea, China is moving forward with militarization, and expanding and intensifying its activities in the maritime and aerial domains, attempting to create a fait accompli for unilaterally changing the status quo by coercion. It is strongly hoped that China will act on the basis of the principle of the rule of law and play active roles in the region and the international community in a more cooperative manner.

(2) Military Activities in Japan's Surrounding Waters and Airspace

The Chinese Navy and Air Force have in recent years expanded and intensified their activities in the surrounding sea areas and airspace of Japan, including the area surrounding the Senkaku Islands. These activities include those allegedly based on China's unilateral claim on the Senkaku Islands, and cases involving the one-sided escalation of activities, creating a situation of great concern to Japan. The Air Self-Defense Force (ASDF) has continued to make frequent scrambles against Chinese aircraft, as indicated by an all-time high of 851 scrambles in FY2016. China has also continued naval ships' passage through waters near Japan for navigation to distant waters such as the Indian Ocean, as well as activities viewed as training of maritime and air forces making forays to the Pacific and the Sea of Japan. Although China can be suspected of intending to "regularize" these activities, there is a view that China is attempting to take advantage of the "regularization" to alleviate concerns over these activities.¹⁸ At the same time, it appears that China continues to improve the complexity of its activities. Given that Chinese efforts are also seen to improve practical joint operational capabilities, Chinese military activities in Japan's surrounding waters and airspace should be closely watched with grave attention.

a. Activities in the East China Sea (including the Areas around the Senkaku Islands)

Chinese naval vessels have been conducting operations in the East China Sea continuously and actively. Stating its own position regarding Japan's Senkaku Islands, China claims that patrols by Chinese naval vessels in the sea areas under its jurisdiction are completely justifiable and lawful. Chinese naval vessels have been continuously operating in the areas near Japan's Senkaku Islands. In June 2016, a Jiangkai I-class frigate became the first ever Chinese Navy combatant vessel to enter Japan's contiguous zone around the Senkaku Islands. Furthermore, in January 2018, a Shang-class submerged submarine and a Jiangkai II-class frigate passed into the contiguous zone around the Senkaku Islands on the

same day. This was the first time a submerged Chinese submarine was identified and announced as transiting through the contiguous waters off the Senkaku Islands. In June 2020, submerged transit of a submarine presumed to belong to China was confirmed in the contiguous zone surrounding Amami Oshima Island. In recent years, Chinese Navy intelligence gathering vessels (AGIs) have also been found conducting activities in multiple cases. A Chinese Navy Dongdiao-class AGI repeatedly navigated back and forth outside of the contiguous zone south of the Senkaku Islands in November 2015. In June 2016, an AGI of the same type sailed in Japan's territorial waters near Kuchinoerabujima Island and Yakushima Island, and then passed Japan's contiguous zone north of Kitadaitojima Island. Subsequently, the vessel repeatedly conducted east-west passages outside the contiguous zone south of the Senkaku Islands. This was the first navigation by a Chinese Navy vessel in Japanese territorial waters in the approximately 12 years since 2004.

China's air forces are also actively conducting activities in the East China Sea on a routine basis. Their activities are thought to include warning and surveillance, combat air patrols (CAPs), and training. Chinese military aircraft have recently become more active in airspace closer to Japan's Southwestern Islands. Their activities have possibly been intended to operate the "East China Sea ADIZ." In April 2018, an alleged Chinese BZK-005 unmanned reconnaissance vehicle was identified flying over the East China Sea. Furthermore, Chinese military aircraft have been confirmed as operating in airspace close to the Senkaku Islands in recent years.

b. Advancements into the Pacific Ocean

Chinese Navy combatant vessels continue to transit the waters near Japan to advance into the Pacific Ocean and return to base with high frequency. The advancement routes are multiplying. Chinese naval vessels have been confirmed as transiting the sea area between the main island of Okinawa and Miyakojima Island, and have been found passing through the Osumi Strait, the sea area between Yonagunijima Island and Nakanokamishima Island near Iriomotejima Island, the sea area between Amamioshima Island and Yokoatejima Island, the Tsugaru Strait, and the Soya Strait. Through these activities, China has apparently attempted to "regularize" naval ships' advancements into the Pacific Ocean through waters near Japan and improve its capabilities for accessing the open ocean and conducting operations there. In December 2016, the aircraft carrier "Liaoning" navigated the East China Sea together with other vessels and passed the sea area between the main island of Okinawa and Miyakojima Island to advance to

¹⁸ According to Taiwan's 2009 National Defense Report

the Pacific for the first time. In April 2018, the Chinese Ministry of National Defense announced that the aircraft carrier “Liaoning” and multiple other vessels passed through the Bashi Channel to advance to the Pacific and conducted force-on-force exercises that included carrier-based fighters. At that time, the Japanese Maritime Self-Defense Force (MSDF), conducting warning and surveillance, confirmed for the first time the carrier used for what were presumed to be carrier-based fighters for take-off and landing in the Pacific Ocean. Moreover, the aircraft carrier “Liaoning” advanced to the Pacific Ocean through the sea area between the main island of Okinawa and Miyakojima island in June 2019, together with vessels such as a Fuyu-class fast combat support ship pointed out to be for supplying the aircraft carrier group. Furthermore, in April 2020, a fleet, including the aircraft carrier “Liaoning,” passed through the waters of the main island of Okinawa and Miyakojima island to enter the Pacific Ocean, and deployed through the Bashi Strait to the South China Sea. Later, the fleet again passed through the Bashi Strait and entered the Pacific Ocean. Within the same month it passed through the waters of the main island of Okinawa and Miyakojima island to the East China Sea. In addition, in April 2021, a fleet including aircraft carrier “Liaoning” and the Renhai-class destroyer were seen passing through the waters of the main island of Okinawa and Miyakojima Island southward to the Pacific Ocean, and then within the same month navigated northward through the same sea area to the East China Sea. Also, in the voyages that took place in April 2020 and April 2021, carrier-based fighters have been confirmed taking-off and landing in the Pacific. The activities are worthy of attention as indicating the enhancement of the capabilities of China’s naval forces, including the aircraft carrier, and the improvement of its capabilities to project power to more distant areas.

Regarding air forces, the advancement of a PLAN Y-8 early warning aircraft into the Pacific Ocean, passing between the main island of Okinawa and Miyakojima Island, was confirmed for the first time in July 2013. The advancement of Air Force aircraft into the Pacific was also confirmed in 2015. Since 2017, advances into the Pacific Ocean via this airspace have become more active. The types of aircraft passing through the airspace have also diversified year by year. H-6K bombers and Su-30 fighters were confirmed by 2016 and the Y-8 EW aircraft in July 2017. At least one bomber was confirmed as carrying objects in the form of missiles. The U.S. DoD has pointed out that such Chinese bomber flights indicated the Chinese forces’ training targeting the United States and its allies.¹⁹ Flight patterns of Chinese military

aircraft have also been changing. Flights from the East China Sea to the Pacific Ocean, passing between the main island of Okinawa and Miyakojima Island, and from the direction of the Bashi Channel to the Pacific Ocean, both with the return trips on the same shuttle routes, have been repeatedly made. Since November 2016, H-6K bombers and other aircraft were confirmed as flying around Taiwan. In August 2017, H-6K bombers were confirmed as flying to waters off the Kii Peninsula after advancing to the Pacific Ocean via waters between the main island of Okinawa and Miyakojima Island for the first time. Through frequent long-distance flights of bombers and other aircraft, including advancements to the Pacific, and their advanced flight paths and composition, China is thought to be demonstrating its presence around areas including those surrounding Japan, and planning further enhancements to more practical operational capabilities.

Additionally, activities considered planned to improve sea and air joint operational capabilities in more distant areas, such as what seemed to be air-to-ship attack drills including advancements to the Pacific Ocean, have been seen in recent years. In April 2019 and February 2020, the PLA Eastern Theater Command announced that joint training was conducted in waters east of Taiwan. China is expected to further expand and intensify naval and air activities in the Pacific Ocean.

c. Activities in the Sea of Japan

While the Chinese Navy has been active in the Sea of Japan during training and on other occasions for some time, its Air Force activities in the area have also intensified of late. “Force-on-force exercises” in the Sea of Japan by Chinese Navy ships were announced for the first time in August 2016. Three aircraft apparently participated in the exercises, including two H-6 bombers that passed through the Tsushima Strait into the Sea of Japan for the first time.

In December 2017, Chinese Air Force aircraft (H-6K bombers) passed through the Tsushima Strait and advanced to the Sea of Japan. Then, Chinese fighter aircraft (Su-30 fighters) were confirmed as advancing to the Sea of Japan for the first time. In February 2018, it was confirmed for the first time that the Y-9 intelligence gathering aircraft entered the Sea of Japan via the Western Channel of Tsushima Strait (the strait between Tsushima in Nagasaki Prefecture and the Korean Peninsula).

Since 2018, China’s sea and air forces have further intensified activities in the Sea of Japan involving passages through the Tsushima Strait. It is considered that the PLA will continue to expand and intensify its activities in the Sea of Japan.

¹⁹ According to the annual report “Military and Security Developments Involving the People’s Republic of China,” U.S. DoD (2018)



China Coast Guard vessels repeatedly intruding into the Japanese territorial waters around the Senkaku Islands [Japan Coast Guard]

(3) Activities of Chinese Ships Including Coast Guard Vessels, and Aircraft around the Senkaku Islands, etc.

China Coast Guard vessels have been seen almost every day in the contiguous zone of the Senkaku Islands, Japan's inherent territory, and repeatedly intruded into Japan's territorial waters. Since the activities of China Coast Guard vessels based on China's own assertion conducted in Japan's territorial waters around the Senkaku Islands are violating international law in the first place, Japan has been strongly protesting against these activities and requested them to leave many times. Despite Japan's strong protests, however, they continued to intrude into the Japanese territorial waters in FY2020. In May, July, August, October, November, December 2020 as well as in January, February, March, April, and May 2021, China Coast Guard vessels entered Japan's territorial waters and attempted to approach Japanese fishing boats, which were navigating in the area. Among these incidents, China Coast Guard vessels entered Japan's territorial waters around the Senkaku Islands and stayed there for more than 57 hours, the longest period ever, in October 2020.

Providing the background, in December 2008, China Maritime Surveillance vessels intruded into Japan's territorial waters for the first time and hovered and drifted, running counter to international law. Later, China Maritime Surveillance and China Fisheries Law Enforcement Command vessels gradually intensified their activities in the Japanese territorial waters. Such activities have intensified greatly since September 2012, when the Japanese Government acquired the ownership of three of the Senkaku Islands (Uotsurishima Island, Kitakojima Island, and Minamikojima Island). The number of Chinese government ships intruding into the Japanese territorial waters in a day had been limited to two or three until August 2016. Later, however, the number has reached four frequently.

China is seen to be steadily strengthening an operational

posture intended to use Coast Guard vessels to intrude into Japan's territorial waters. Specifically, vessels sent to waters near the Senkaku Islands have grown larger in size. At least one of the vessels intruding into Japan's territorial waters has been a 3,000-ton or larger vessel since August 2014. Since February 2015, three 3,000-ton or larger vessels have been confirmed as entering Japan's territorial waters simultaneously. Since December of the same year, Chinese ships armed with what appear to be cannons have repeatedly intruded into the Japanese territorial waters.

Cases indicating the improvement of China Coast Guard vessels' operational capabilities have been also confirmed. From April to August 2020, China Coast Guard vessels were seen in the contiguous zone of the Senkaku Islands for a record 111 consecutive days. In that year, the number of days when China Coast Guard vessels were seen in the contiguous zone of the Senkaku Islands hit an all-time high of 333. The total number of China Coast Guard vessels seen in the zone also reached an all-time high of 1,161.

Additionally, cases indicating China's capabilities to send numerous China Coast Guard vessels and other ships to waters around the Senkaku Islands simultaneously have also been identified. In early August 2016, approximately 200 to 300 Chinese fishing boats advanced to the contiguous zone of the Senkaku Islands. At that time, as many as up to 15 China Coast Guard vessels and other ships were confirmed in the contiguous zone simultaneously. Over five days, a large number of China Coast Guard vessels, other ships, and fishing boats repeatedly intruded into Japan's territorial waters.

In December 2012, a fixed-wing aircraft of the State Oceanic Administration was identified as the first Chinese aircraft to intrude into Japan's airspace around the Senkaku Islands. Until March 2014, aircraft of the State Oceanic Administration were frequently confirmed as approaching the airspace. In May 2017, it was confirmed that an object that appeared to be a small drone was flying above a China Coast Guard vessel intruding into the Japanese territorial waters around the Senkaku Islands. This flight also constitutes an invasion of Japan's territorial airspace.

China has thus relentlessly continued attempts to unilaterally change the status quo by coercion in the sea area around the Senkaku Islands, leading to a grave matter of concern. Japan cannot accept China's actions to escalate the situation.

Among waters other than those around the Senkaku Islands, China Coast Guard vessels were confirmed as passing through the territorial waters of Japan around Tsushima Island (Nagasaki Prefecture), Okinoshima Island (Fukuoka Prefecture) and the Tsugaru Strait in

July 2017. The same vessels were also confirmed to have sailed in Japan’s territorial waters from Sata Cape to the Kusagaki Islands (both in Kagoshima Prefecture) in August that year. In July 2019, a China Coast Guard vessel was seen sailing in Japan’s territorial waters around Tappisaki and Omasaki (both in Aomori Prefecture).

- See Fig. I-2-2-8 (PLA’s Recent Activities in the Surrounding Sea Area and Airspace of Japan [image])
- Fig. I-2-2-9 (Number of Announcements of Chinese Combatant Ships’ Activities around the Southwestern Islands and the Soya and Tsugaru Straits)
- Fig. I-2-2-10 (Number of Announcements of Chinese Military Aircraft’s Passage between the Main Island of Okinawa and Miyakojima Island)
- Fig. I-2-2-11 (Number of Announcements of Chinese Combatant Ships’ Passage through the Tsushima Strait)
- Fig. I-2-2-12 (Number of Announcements of Chinese Military Aircraft’s Passage through the Tsushima Strait)
- Fig. I-2-2-13 (Changes in the Number of Scrambles against Chinese Aircraft)
- Fig. I-2-2-14 (Activities by China Coast Guard Vessels, etc., around the Senkaku Islands)

(4) Trends of Activities in the South China Sea

China has also been intensifying its activities based on assertions, which are conflicting with existing laws and orders of the seas, in the South China Sea, including waters around the Spratly Islands and the Paracel Islands, over which territorial disputes exist with neighbors, including some member states of the Association of Southeast Asian Nations (ASEAN).

Since 2014, on seven features of the Spratly Islands (Fiery Cross Reef, Mischief Reef, Subi Reef, Cuarteron Reef, Gaven Reefs, Hughes Reef, and Johnson South Reef), China pressed ahead with large-scale and rapid land reclamation. The Philippines-China arbitration award issued in July 2016 denied the “historic rights” as the basis of the “nine-dash line” claimed by China, and determined the illegality of China’s activities such as land reclamation. However, China has made it clear that it would not comply with the award and is currently continuing military activities while promoting the development of military facilities, such as batteries, and various kinds of infrastructure that can be used for military purposes, including runways, ports, hangars, and radar facilities, to militarize these features.

On Fiery Cross, Subi and Mischief Reefs, called the Big Three of the Spratly Islands, China has developed

Fig. I-2-2-8 PLA’s Recent Activities in the Surrounding Sea Area and Airspace of Japan (image)

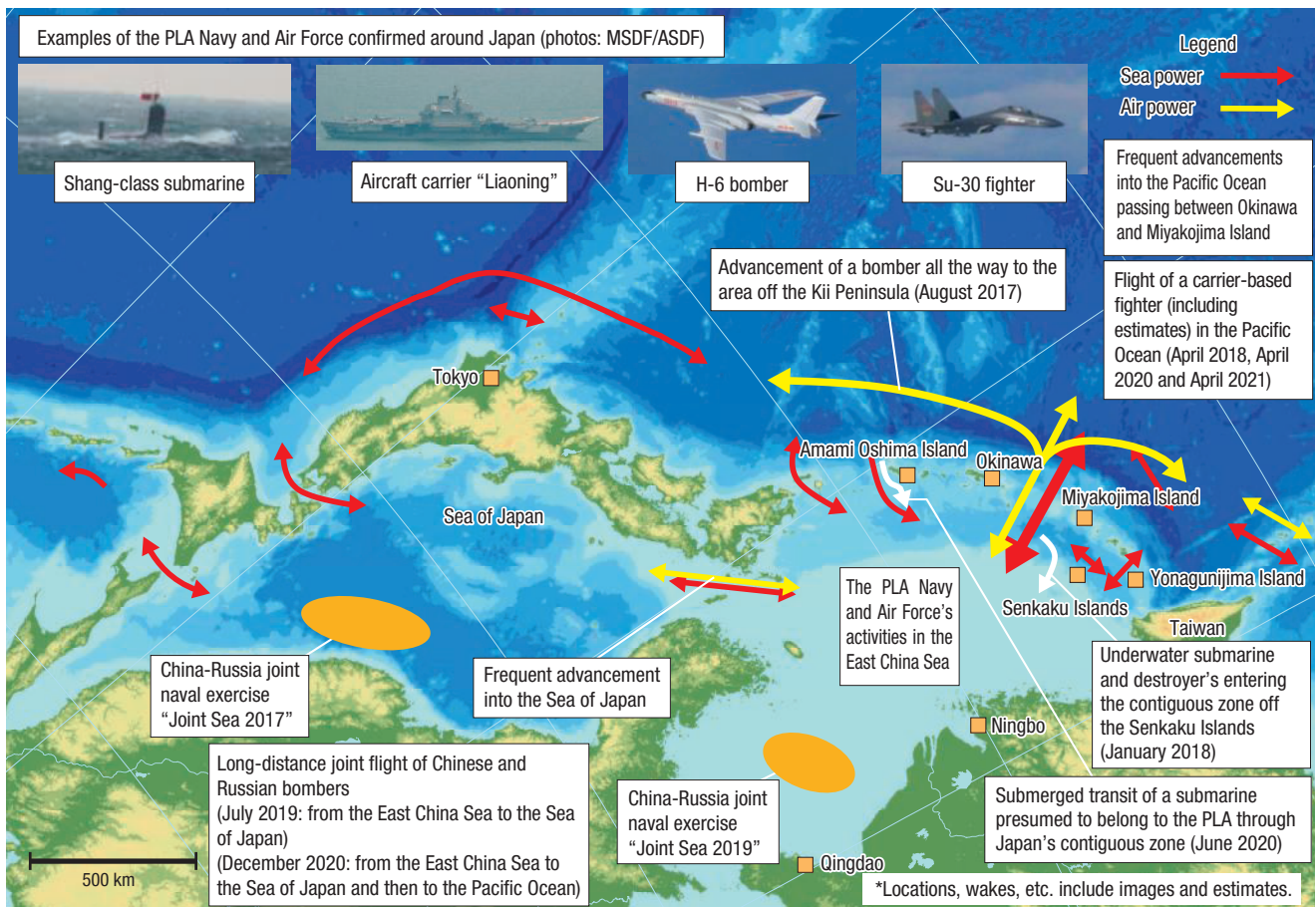


Fig. I-2-2-9

Number of Announcements of Chinese Combatant Ships' Activities around the Southwestern Islands and the Soya and Tsugaru Straits

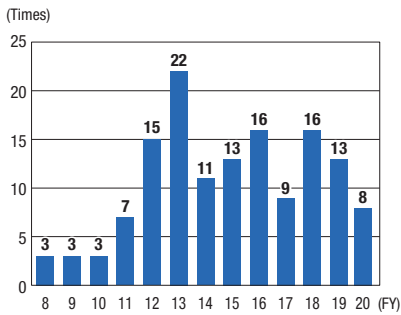


Fig. I-2-2-10

Number of Announcements of Chinese Military Aircraft's Passage between the Main Island of Okinawa and Miyakojima Island

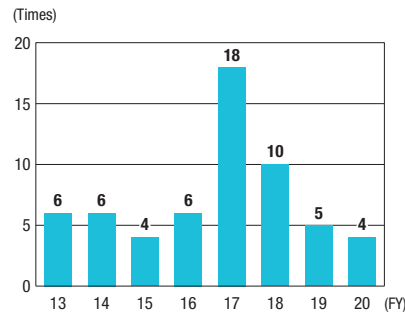


Fig. I-2-2-11

Number of Announcements of Chinese Combatant Ships' Passage through the Tsushima Strait

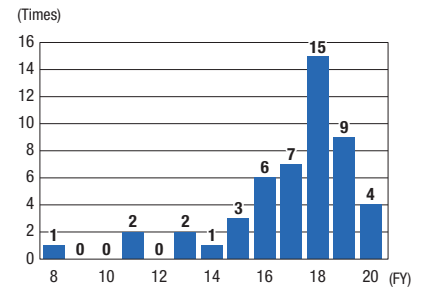


Fig. I-2-2-12

Number of Announcements of Chinese Military Aircraft's Passage through the Tsushima Strait

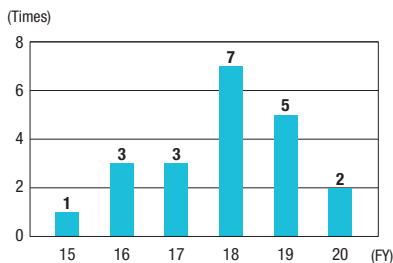


Fig. I-2-2-13

Changes in the Number of Scrambles against Chinese Aircraft

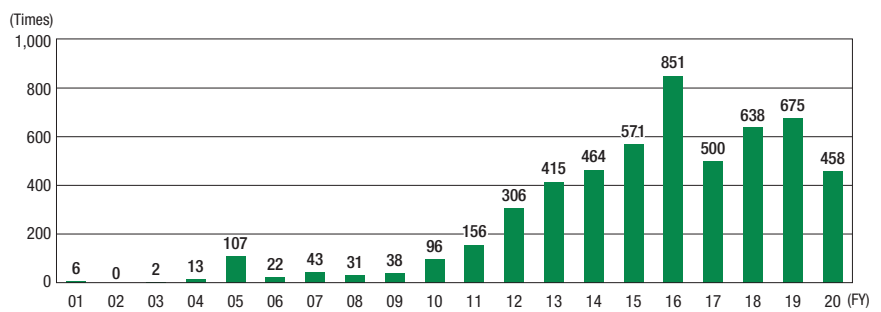
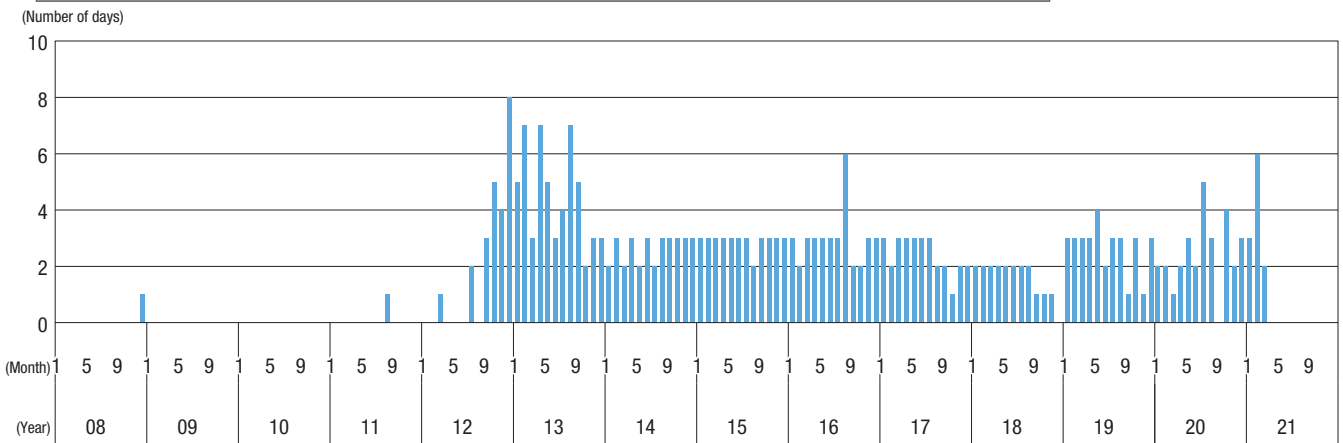


Fig. I-2-2-14

Activities by China Coast Guard Vessels, etc., around the Senkaku Islands

Changes in number of days on which China Coast Guard vessels, etc. intruded into the Japanese territorial waters



Identification in the contiguous zone

Year	Number of days (days)	Total number of identified vessels (vessels)
2012	79	407
2013	232	819
2014	243	729
2015	240	709
2016	211	752
2017	171	696
2018	158	607
2019	282	1,097
2020	333	1,161
2021	81	300

* The figure for 2012 is that from September to December, and the figure for 2021 is as of the end of March.

batteries for anti-aircraft guns, missile shelters, underground storage facilities pointed out to be munitions storage, large ports capable of accommodating combatant ships and runways available for takeoff and landing of fighters and bombers.

On Fiery Cross Reef in April 2016, a Navy patrol aircraft flying over the South China Sea landed for a nominal purpose of evacuating emergency patients. On Subi and Mischief Reefs in July of the same year, China forced aircraft test flights on runways available for the takeoff and landing of large aircraft. Reportedly, a Y-7 transport aircraft was confirmed on Mischief Reef in January 2018, a Y-8 special mission aircraft on Subi Reef in April that year, and Y-20 transport airport on Fiery Cross Reef in December 2020. Additionally, in April 2018, it was reported that anti-ship cruise missiles and surface-to-air missiles were deployed on Fiery Cross, Subi and Mischief Reefs for military training and that radar jamming systems were deployed on Mischief Reef. Furthermore, it was reported in May 2020 that China possibly deployed aircraft including Y-8 patrol and Y-9 early warning aircraft and other aircraft to the Fiery Cross Reef in rotation.

On the other four features, it is pointed out that the construction of facilities, such as harbors, helipads, and radars, has made progress and that what appears to be large anti-aircraft guns and close in weapon systems (CIWS) may have already been deployed. If these features are used for full-scale military purposes, it could significantly change the security environment in the Indo-Pacific region.

China carried out the militarization of the Paracel Islands before that of the Spratly Islands. China has reportedly extended the runway to nearly 3,000 m on Woody Island since 2013. In October 2015, October 2017, and June 2019, China was reported to have deployed J-11, J-10 and other fighters on the island. In February 2016 and January 2017, the existence of equipment likely to be surface-to-air missiles was confirmed. It has been noted that the takeoff and landing training of the H-6K bombers in the South China Sea announced by the Chinese Ministry of National Defense in May 2018 was carried out on Woody Island.

In recent years, Chinese vessels have allegedly been conducting what are likely to be survey activities in Scarborough Shoal, where a standoff took place between Chinese and Philippine government ships in April 2012. It is pointed out that new land reclamations on the shoal might be seen in the future.²⁰ It is also pointed out that if China conducts land reclamations and installs radar facilities, runways, and other infrastructure on

Scarborough Shoal, it could possibly increase its ability for situation awareness and power projection capabilities in the surrounding sea area and ultimately enhance its operational capabilities throughout all the areas of the South China Sea. Attention must continue to be paid to the situation going forward.

The activities in sea and airspace are expanding and intensifying as well. In March 2009, December 2013 and September 2018, Chinese naval and other vessels approached and intercepted U.S. Navy vessels navigating in the South China Sea. In May 2016, February 2017 and May 2017, PLA fighters allegedly flew close to U.S. Forces aircraft. In July and August 2016, after the Philippines-China arbitration award was rendered, PLAAF H-6K bomber aircraft conducted “combat air patrol” in the airspace close to Scarborough Shoal. The Chinese Ministry of National Defense announced that this patrol would “become normal.” In December 2016, H-6 bombers reportedly flew along the so-called nine-dash line. In September of the same year, the China-Russia bilateral naval exercise “Joint Sea 2016” was conducted for the first time in the South China Sea.

A field training exercise by naval vessels including the aircraft carrier “Liaoning” and a naval review ceremony, regarded as the largest since the founding of China, were conducted in the same area from the end of March until April 2018. In 2019, anti-ship ballistic missile tests were reportedly conducted in the South China Sea for the first time. In 2019 and in April 2020, the deployment of the aircraft carrier “Liaoning” accompanied by Fuyu-class fast combat support and other ships in the South China Sea was reported. Furthermore, China Coast Guard vessels reportedly fired warning shots at fishing boats of neighboring countries. When China Coast Guard vessels interrupted Vietnam’s oil and natural gas development within its exclusive economic zone from July to October 2019, they reportedly visited Fiery Cross Reef for supply.

In April 2020, China unilaterally announced the establishment of Xisha (Paracel) District and Nansha (Spratly) District under Sansha City in the Hainan province. China conducted simultaneous military exercises in three sea areas (South China Sea, East China Sea, and Yellow Sea) in July and is believed to have launched middle-range ballistic missiles in August 2020. In this way, it appears that China seeks to expand its presence and enhance war-sustaining and other joint operational capabilities including military and other means in the South China Sea.

Such activities conducted by China based on its own assertions, which are conflicting with existing laws and orders of the seas, unilaterally change the status quo

²⁰ According to the statement by then U.S. Chief of Naval Operation John Richardson in March 2016

and further advance its efforts to create a fait accompli. Japan is deeply concerned about these activities, and the concern is shared with the international community, including the United States and other G7 Member States. For example, in July 2020, the United States released a U.S. Secretary of State’s statement stating that China’s maritime claims in the South China Sea were unlawful.

China asserts that some of the ASEAN member states including the Philippines and Vietnam are illegitimately occupying features. However, China’s development work on the features is of a scale incomparable to the activities carried out by other countries and is conducted at a rapid pace.²¹

In any case, the issues surrounding the South China Sea are directly related to peace and stability in the Indo-Pacific region and are a legitimate concern not only for Japan, which has major sea lanes in the South China Sea, but also for the entire international community. Countries concerned, including China, are urged to refrain from unilateral actions that heighten tension and act on the basis of the principle of the rule of law.

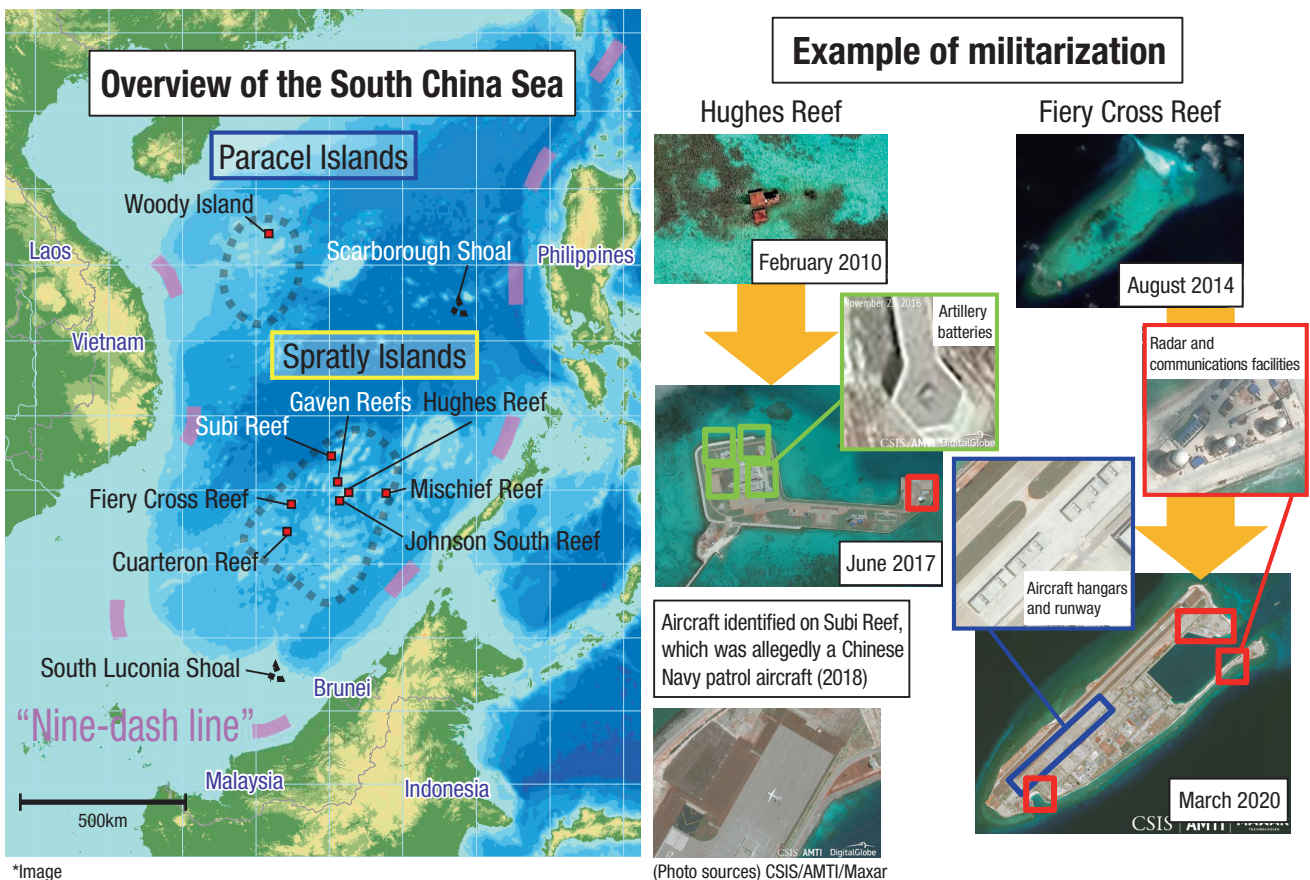
 Fig. 1-2-2-15 (China’s Militarization of the South China Sea [image])

(5) Trends in the Indian Ocean and Other More Distant Waters

The Chinese Navy is considered to be shifting towards “protection missions on the far seas” and has been steadily increasing its capabilities to conduct operations in more distant waters, such as the Indian Ocean, in recent years. Progress has been seen in the Navy’s development of such equipment as large combatant ships and replenishment ships and in its operational initiatives. For example, since December 2008, Chinese Navy vessels have been deployed off the coast of Somalia and in the Gulf of Aden to take part in international counter-piracy efforts. In December 2019, the Chinese Navy conducted its first multilateral exercise with its Russian and Iranian counterparts in the northern Indian Ocean. Activities of Chinese Navy submarines have also been confirmed continuously in the Indian Ocean. They have been reported to make port calls at Sri Lanka’s Colombo, Pakistan’s Karachi, and Malaysia’s Kota Kinabalu. In January 2020, China reportedly sent a submarine for drills with Pakistan in the northern Arabian Sea.

Chinese forces have expanded activities not only in the Indian Ocean but also in other waters. In September

Fig. 1-2-2-15 China’s Militarization of the South China Sea (image)



21 According to “The Asia-Pacific Maritime Security Strategy” U.S. DoD (August 2015)

2016, China-Russia “Joint Sea” bilateral naval exercises took place in waters including the Mediterranean Sea. In November 2019, the Chinese Navy conducted its first multilateral exercises with its Russian and South African counterparts in waters around the Cape of Good Hope. China has also deployed a space observation support ship in the southern Pacific and dispatched a military hospital ship to waters including the southern Pacific as well as those near Latin America under “Mission Harmony.”

In September 2015, five Chinese military vessels reportedly sailed in the high seas of the Bering Sea and in U.S. territorial waters near the Aleutian Islands. Moreover, in January 2018, China published a white paper entitled “China’s Arctic Policy,” which mapped out a policy of active involvement in Arctic initiatives, including efforts to build a “Polar Silk Road” through the development of Arctic sea routes. It is pointed out that China could take advantage of scientific survey and commercial activities to increase its presence including military activities in the Arctic sea.²²

Additionally, China has been remarkably trying to secure overseas outposts such as harbors, which would help support its operations in far seas. For example, in August 2017, China began to operate a “support base” for logistics support of the PLA in Djibouti, a strategic point in Eastern Africa facing the Gulf of Aden. Since April 2018, a pier viewed as potentially accommodating large replenishment ships has been under construction on the “support base” coast. Moreover, it is pointed out that in addition to Djibouti, China is potentially considering and planning military logistics facilities overseas.²³ In recent years, China has been promoting its “Belt and Road” Initiative (BRI) whose main purpose is advertised as establishing an economic zone in regions including the Eurasian continent, with the Chinese military possibly taking on the role of the shield behind the initiative by such means as the stabilization of areas via counter-piracy activities and the improvement of counter-terrorism capabilities in coastal states through bilateral and multilateral exercises. While it is thought that the initiative includes a strategic intention to expand its influence in the region, it is possible that the initiative will further improve the PLA’s operational capabilities in the Indian Ocean, Pacific Ocean and elsewhere. For example, China’s support for the construction of port infrastructure in Pakistan, Sri Lanka, Bangladesh and other Indian Ocean countries as well as Pacific island countries including Vanuatu could lead China to secure outposts available for its military purposes.

(6) Objectives of Activities in Waters and Airspace

The development and activities of Chinese naval and air forces, descriptions in defense white papers, China’s geographical conditions and globalizing economy, and other factors indicate that the recent water and airspace activities of the Navy, Air Force and other Chinese organizations have the following objectives:

The first is to intercept operations by adversaries in waters and airspace as far as possible from China in order to defend its territorial land, waters and airspace. Behind this objective is an increase in the effectiveness of long-range attacks due to recent progress in science and technology.

The second is to develop capabilities to deter and prevent Taiwan’s independence. China maintains that it will not allow any foreign intervention in solving the Taiwan issue and realizing the unification of China. To ensure the prevention of foreign intervention in the Taiwan issue, China needs to enhance its operational capabilities at sea and airspace as Taiwan is surrounded by the sea in all directions.

The third is to weaken the control of other countries on islands subject to China’s territorial claims and enhance the claims through various surveillance activities and use of force in waters and airspace surrounding these islands. Such activities are considered to also have the purpose of creating a fait accompli as part of the reasons for unilaterally changing the status quo and justifying China’s claims based on its own concept of “legal warfare.”

The fourth is to acquire, maintain, and protect its maritime rights and interests. China is engaged in oil and gas drilling as well as building facilities and surveying in the East and South China Seas. It has been confirmed that in addition to the existing four platforms, China has built 12 additional offshore platforms on the Chinese side of the Japan-China median line of the East China Sea since June 2013. In late June 2016, the installment of an anti-surface vessel radar and a surveillance camera was confirmed on one of the platforms. Attention is to be paid to matters regarding the platforms, including the purpose of such equipment. Japan has repeatedly lodged protests



Key Words “Belt and Road” Initiative

A concept for an economic sphere proposed by President Xi Jinping. The “Silk Road Economic Belt” (“One Belt”) and the “21st Century Maritime Silk Road” (“One Road”) were announced in September and October 2013, respectively. Since then, the two concepts are collectively referred to as the “Belt and Road” Initiative.

²² According to the annual report “Military and Security Developments Involving the People’s Republic of China,” U.S. DoD (2019)

²³ According to the annual report “Military and Security Developments Involving the People’s Republic of China,” U.S. DoD (2020)

against China's unilateral development and demanded the termination of such work.

The fifth is to defend its sea lanes of communications. In the background is the fact that its sea lanes, including its oil transportation routes from the Middle East, are essential for the Chinese economy. Given the recent strengthening of the Chinese Navy and Air Force, it is believed that they have been expanding military capabilities to cover distant waters beyond China's near seas.

Given these objectives of China's water and airspace activities and recent trends, it is believed that China plans to further expand the sphere of its activities, and further intensify its operations in waters surrounding Japan, including the East China Sea and the Pacific Ocean, as well as in the South China Sea and the Indian Ocean.

Meanwhile, in recent years, China has shown interest in taking steps to avoid and prevent unexpected contingencies in sea areas and airspace. For example, in April 2014, China, together with other countries such as Japan and the United States, adopted the Code for Unplanned Encounters at Sea (CUES), which sets forth the standards of behavior in the case that the naval vessels or aircraft of the Western Pacific Naval Symposium (WPNS) member states have unexpected encounters. Also, in June 2018, Japan and China started the implementation of their Maritime and Air Communication Mechanism between the Defense Authorities to avoid unexpected collisions between SDF and PLA vessels and aircraft.

7 International Military Activities

In recent years, the PLA has been indicating its positive attitude on nontraditional security missions such as peacekeeping, humanitarian assistance and disaster relief, and counterpiracy, dispatching numerous units for such overseas missions.

China has vowed to consistently support and actively participate in UN PKO, increasing its presence in UN PKO. China, for the first time, released a white paper regarding its involvement in UN PKO in September 2020 titled "China's Armed Forces: 30 Years of UN Peacekeeping Operations." According to this white paper, China has sent more than 40,000 military personnel on 25 missions of UN PKO. According to the UN, as of the end of December 2020, China had a total of 2,520 troops, civilian police and military observers — the largest number of peacekeepers among the permanent members of the UN Security Council — engaged in UN peacekeeping activities, including the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA). China has also largely increased its share of the UN PKO budget. The Chinese share

has remained the second largest, after the U.S. share, since 2016.

Moreover, China has been actively participating in counter-piracy activities off the coast of Somalia and in the Gulf of Aden as well as humanitarian assistance and disaster relief activities. In 2011, in view of the deteriorating situation in Libya, China carried out a military evacuation of Chinese nationals for the first time.

It is pointed out that factors behind such Chinese attitude include the growing need for protecting and promoting China's national interests overseas following the expansion of national interests beyond its national borders, China's attempt to verify military capabilities including units' long-distance deployment, its intent to raise its status by demonstrating its will to fulfill its responsibilities to the international community, its hope to diffuse the military's peaceful and humanitarian images, and its attempt to enhance relations with PKO regions including African countries.

8 Education and Training

In recent years, the PLA under the policy of building a military that "can fight and win a war" has promoted practical exercises including large-scale ones such as joint exercises led by theater commands, force-on-force exercises, landing exercises, inter-theater exercises, and large exercises including distant ones, as well as night-time exercises and joint exercises with other countries, in order to strengthen its operational capabilities. The new military training regulations in effect since January 2018 referred to the execution of joint and full-spectrum operation based on network information systems, in addition to the definite implementation of practical training as a principle. Moreover, the trial regulation on the supervision of military training that took effect in March 2019 is regarded as China's first attempt to put in place a system that prescribes measures for rectifying practices that are inconsistent with the requirements of actual combat and criteria for identifying malpractice and discipline violations during military training.

In the education spectrum as well, the PLA aims to train soldiers who have the ability to execute joint operations. In 2003, it launched a human resource strategy project to develop human resources capable of directing joint and informatized operations, and of building joint and informatized armed forces. It was reported in 2017 that the PLA National Defense University began training to develop human resources capable of directing joint operations.

China outlined the promotion of the "rule of law" at the fourth plenary session of the 18th CCP Central Committee in 2014, with Chairman Xi referring to the

military as being controlled by law, indicating that the PLA is required to thoroughly implement the “rule of law.” In another development for the indication, Miao Hua, Director of the Political Work Department, and Zhang Shengmin, Secretary of the Central Commission for Discipline Inspection, were selected as members of the 19th Central Military Commission, the supreme decision-making body in the military. The issuance of the trial regulation on military supervision work in January 2020 also suggests the rule of law promotion.

China has been developing defense mobilization systems in order to effectively utilize private resources in case of emergencies, including wars. It enforced the National Defense Mobilization Law as the basic law for defense mobilizations in 2010 and the National Defense Transportation Law for the transportation area in 2016. The “civil-military fusion” policy that China is currently promoting is believed to have its sights set on the routine military use of civilian resources not only in emergencies but also in peacetime. The military use of civilian resources includes civilian ships’ transportation of military equipment. As such initiative generally augments China’s forces available for military missions and is expected to proactively be promoted in the future, the initiative’s implications for the Chinese military forces’ operational capabilities should be watched closely.

9 National Defense Industry Sector

Under the State Administration of Science, Technology and Industry for National Defense (SASTIND) of the Ministry of Industry and Information Technology, a department of the State Council, China’s main national defense industry had consisted of 12 corporations to develop and produce nuclear weapons, missiles and rockets, aircraft, vessels, information systems and other military equipment. The Chinese national defense

industry’s arms sales were pointed out as the second largest after those in the United States in 2017.²⁴ In 2018, China National Nuclear Corporation and China Nuclear Engineering & Construction Corporation was reorganized. After China State Shipbuilding Corporation merged with China Shipbuilding Industry Corporation in 2019, the industry now comprises 10 corporations including China State Shipbuilding Corporation.

While China imports highly sophisticated military equipment and parts that it cannot produce domestically from other countries such as Russia, it is believed that China places emphasis on the enhancement of its military industrial sector, including the domestic production of equipment, to modernize its military. It has been pointed out that China is acquiring technologies ambitiously not only through domestic technology research and development and foreign direct investment, but also via illegal means in the form of secret information theft.²⁵ The trend of the national defense industry sector is directly linked to the modernization of the military and should be closely watched with strong attention.

China’s civil-military fusion policy has been evident in the technology area. China promotes two-way technological exchanges where military technologies are utilized for developing the national economy while civilian technologies are absorbed for national defense development. It also seems interested in absorbing foreign technologies available both for military and civilian purposes. It is pointed out that China’s civil-military fusion policy gives priority to initiatives in seas, outer space, cyber, AI, and other emerging areas for China.

In recent years, China has reportedly promoted the standardization of civilian products for their military adoption from the production stage under the civil-military fusion policy. This initiative is expected to allow the military to more effectively utilize civilian resources.

²⁴ According to “Insights on Peace and Security, No. 2020/2,” Stockholm International Peace Research Institute (SIPRI) (January 2020)

²⁵ According to the annual report “Military and Security Developments Involving the People’s Republic of China,” U.S. DoD (2020)

3 Relations with Countries and Regions

1 General Situation

China, particularly regarding maritime issues over which its interests conflict with others', continues to demonstrate its attitude of realizing its unilateral assertions without compromise, while promoting assertive actions including those to change the status quo by coercion and create a fait accompli for such changes, based on its own assertions incompatible with the existing international order. China has been promoting its BRI as a national strategy, but some BRI-participating countries have recently reconsidering BRI projects due mainly to their fiscal deterioration. Furthermore, it has been pointed that there have been moves toward creating China's own international order, including the establishment of China-led multilateral mechanisms in security, financial to influence political decisions in other countries through efforts such as winning over foreign politicians.²⁶

At the same time, China recognizes that a peaceful and stable international environment is necessary for maintaining sustainable economic development and enhancing China's overall national power. Based on such recognition, China has advocated building a "community of shared future for mankind" and referred to promoting the building of "a new type of international relations based on mutual respect, equity and justice, and win-win cooperation." China proactively carries out military exchanges with other countries. In recent years, China has been engaged in active military exchanges not only with major powers such as the United States and Russia and with its neighboring countries including Southeast Asian countries, but also with countries in Africa and Latin America. The objectives of China's promotion of military exchanges are thought to include alleviating other countries' concerns regarding China by strengthening its relations with these countries, creating a favorable security environment for China, enhancing China's influence in the international community, exploring overseas arms markets, securing stable supplies of natural resources, and ensuring foreign bases.

With regard to the COVID-19 infections that emerged in China, some question China's initial response and delay in providing relevant information. In this situation, there are also views that China is aiming to increase political and economic interest in its own country, while strategically working to form an international and regional order that is advantageous to China and expand

its influence by leveraging support for the COVID-19 infection countermeasures such as so-called "mask diplomacy" and "vaccine diplomacy."

2 Relations with Russia

Ever since the so-called China-Soviet confrontation ended in 1989, China and Russia have placed importance on their bilateral relationship. They have emphasized the deepening of their "strategic partnership" since its establishment in the mid-1990s. In 2001, the China-Russia Treaty of Good-Neighborliness and Friendly Cooperation was concluded. In 2004, the long-standing issue of border demarcation between the two countries came to a settlement. The two countries have a common view on promoting the multipolarization of the world and the establishment of a new international order and have further deepened their relations.

On the military front, since the 1990s, China has purchased modern weapons from Russia, including fighters, destroyers, and submarines. Russia is currently the largest supplier of weapons to China.²⁷ Although China-Russia arms transactions in value in recent years have been lower than in some past period, China has apparently continued to indicate its strong interests in importing advanced Russian defense equipment and in joint equipment development with Russia. For example, China has introduced what are believed to be the latest fourth generation Su-35 fighters and the S-400 surface-to-air missile system from Russia. China has been reported as the first country to import the Russian S-400 missile system. At the same time, it is pointed out that Russia has differentiated the performance of some of the weapons it exports to China, due to its concerns about China's reverse engineering and its policy of not providing China having a ground border with Russia with sophisticated weapons that would pose a threat to Russia. It is also suggested that Russia has concerns about competing with China in arms exports taking into consideration China's improvement of technological power.

Military exchanges between China and Russia take place in such forms as routine mutual visits by senior military officers and bilateral and multilateral exercises. For example, China participated in the Vostok 2018 exercise, viewed as one of the largest Russian military exercises since the end of the Cold War, the Tsentr-2019 exercise in 2019, and Maneuvers "Kavkaz 2020" in

²⁶ According to the statement by then Australian Prime Minister Malcolm Turnbull in December 2017

²⁷ According to "Arms Transfers Database," SIPRI

2020. Additionally, the two countries have held the large-scale bilateral naval exercise “Joint Sea” since 2012. The annual exercise for 2016 took place in the South China for the first time, and that for 2017 was held in the Baltic Sea and Sea of Okhotsk for the first time. In 2016 and 2017, the two countries held the “Aerospace Security” missile defense computer-simulated exercise. Furthermore, China has held the counterterrorism exercise “Peace Mission” between China and Russia or among the member countries of the Shanghai Cooperation Organization (SCO), established in June 2001 including Russia. China likely regards these exchanges as an opportunity to learn about how to operate Russian-made weapons and the operational doctrine of the Russian Armed Forces, which have combat experiences.

In addition, moves indicating deepened China-Russia relations have been confirmed in recent years. In the two countries’ “first joint strategic flight” of bombers in July 2019, their bombers joined in the Sea of Japan and flew to the East China Sea. In September 2019, China and Russia signed a series of documents on cooperation in the military and military technologies.²⁸ Similar trends continued in 2020. In December that year, Russian Defense Minister Sergey Shoigu and Chinese Defense Minister Wei Fenghe held a video teleconference and signed a protocol on the extension of the intergovernmental agreement on mutual notifications of ballistic missile and carrier rocket launches for 10 years. In the same month, Russian and Chinese bombers conducted a long-distance joint flight from the Sea of Japan to the East China Sea and the Pacific Ocean, and the two countries announced that the flight was conducted with the goal of deepening and developing the comprehensive partnership in the new era.

3 Relations with North Korea

China has kept close relations with North Korea under the 1961 Sino-North Korean Mutual Aid and Cooperation Friendship Treaty. Although Chinese and North Korean leaders’ reciprocal visits have been viewed as decreasing since North Korea’s transition to the Kim Jong-un regime, Xi Jinping in June 2019 became the first Chinese president to visit North Korea in 14 years and held his fifth meeting with Chairman Kim. In October 2020, President Xi Jinping sent congratulatory messages to Chairman Kim Jong-un on the 75th anniversary of the Korean Workers’ Party. President Xi expressed the view that China were prepared to make new, positive contributions to peace, stability, development and prosperity of the region, indicating China’s intention to maintain close relations

with North Korea even during the COVID-19 pandemic.

China has reportedly adopted three principles on the Korea Peninsula – (1) the denuclearization of the Korean Peninsula, (2) the maintenance of peace and stability on the Korean Peninsula, and (3) the resolution of problems through dialogue and consultations – indicating that China gives priority to the maintenance of stability and dialogue as well as the denuclearization. Under these principles, China, while agreeing to UN Security Council resolutions to enhance sanctions on North Korea, cooperated with Russia in distributing a draft resolution including a proposal to lift some of the UN sanctions at the council in December 2019.

Although China has vowed to have seriously observed its international obligations, it has been pointed out that Chinese ships have been involved in illicit ship-to-ship transfer prohibited by the UN Security Council resolutions.

4 Relations with Other Countries

(1) Relations with Southeast Asian Countries

As for its relations with countries in Southeast Asia, reciprocal summit-level visits and other activities continue to be actively carried out. China is also actively involved in multilateral frameworks such as ASEAN Plus One (China), ASEAN Plus Three (Japan, China and the ROK), East Asia Summit (EAS) and ASEAN Regional Forum (ARF). Furthermore, China has developed bilateral relations through infrastructure development support, etc., under the BRI.

On the military front, there seems to be moves that China has made efforts toward military confidence building, such as the first ASEAN-China Maritime Field Training Exercise, which took place in October 2018. In July 2019, it was reported that a secret deal on China’s exclusive use of part of Cambodia’s Ream Naval Base had been signed between the two countries. Concerning this matter, the Cambodian side denied the existence of such a fact, saying that hosting foreign military bases is against its Constitution.

In July 2016, an arbitration award based on the United Nations Convention on the Law of the Sea (UNCLOS) adjudicating the Philippines’ case against China in the South China Sea was rendered, accepting most of the Philippine claims. After that, the Philippines was said to have refrained from referring to the arbitration award. In September 2019, however, a Philippine Presidential Office spokesperson noted that the arbitration award was still a subject in bilateral talks, and in September 2020, President Rodrigo Duterte remarked at the United

²⁸ According to the Russian military newspaper *Krasnaya Zvezda* (the “Red Star”) on September 6, 2019

Nations General Assembly that, “The (Arbitral) Award is now part of international law beyond compromise and beyond the reach of passing governments to dilute, diminish, or abandon.” In April 2019, the Philippines announced a protest statement against China over massive Chinese fishing boats confirmed as near Thitu Island under effective Philippine control among the Spratly Islands.²⁹ Furthermore, the Government of the Philippines announced that it had lodged a protest in April 2020 against China in relation to an incident in which a Chinese ship irradiated a Filipino ship in February 2020.

In July 2017 and March 2018, the Vietnamese government reportedly made foreign companies, engaged in oil drilling in the South China Sea with the permission of the Vietnamese government, cancel the drilling under the pressure from China. Chinese and Vietnamese government ships staged a standoff over oil and natural gas drilling within Vietnam’s exclusive economic zone from July 2019 until Vietnam withdrew its HAKURYU-5 drilling rig in October of that year to end the standoff. The Government of Vietnam also announced in April 2020 that it had protested the Chinese side concerning the incident in which a China Coast Guard vessel rammed and sunk a Vietnamese fishing boat near the Paracel Islands.

Indonesia has had frequent disputes with China over Chinese fishing boats’ operations within Indonesia’s exclusive economic zone and taken strong actions against foreign fishing boats engaging in alleged illegal operations. Recently, the Indonesian government filed a strong protest against Chinese fishing boats’ illegal operations near Indonesia’s Natuna Islands from December 2019 to January 2020, rejecting China’s assertion on the nine-dash line anew.

China and ASEAN have continued talks to discuss the formulation of the Code of Conduct of Parties in the South China Sea (COC) and Chinese Premier Li Keqiang announced in November 2018 that he hoped to complete negotiations within three years. In July 2019, China announced at the Chinese and ASEAN Foreign Ministers’ meeting that they had completed the first reading of the Single Draft COC Negotiating Text.

(2) Relations with Central Asian Countries

The Xinjiang Uyghur Autonomous Region, located in the western part of China, is situated next to Central Asia. Therefore, China is deeply concerned about the political stability and security situations, such as terrorism by Islamic extremists, in Central Asian states. Such concerns of China appear to be reflected in China’s tightened

border control and its engagement in the SCO and the stabilization of Afghanistan. Moreover, China is strongly interested in Central Asia, with a view to diversifying its supply sources and procurement methods for resources. China promotes cooperation in the energy field with Central Asian countries, such as the construction of oil and natural gas pipelines between China and Central Asian nations.

(3) Relations with South Asian Countries

China has traditionally maintained a particularly close relationship with Pakistan, and mutual visits by their summit leaders take place frequently. Their cooperation in the military sector, including bilateral exercises, exporting weapons and transferring military technology, is also considered to be deepening. As the importance of sea lanes increases for China, it is believed that the importance of Pakistan is rising for China accordingly, partly because of the geopolitical features of Pakistan which faces the Indian Ocean. China has also conducted various bilateral military exercises with Pakistan, including naval search and rescue training and anti-terrorism drills. The China-Pakistan Economic Corridor (CPEC), a China-supported development plan for power facilities and transportation infrastructure in the region stretching from the Port of Gwadar to Kashgar in the Xinjiang Uyghur Autonomous Region, is a flagship project of the BRI. While some have pointed out that the project has run into difficulties as indicated by delays and partial withdrawals due to Pakistan’s deteriorating financial situation, the project’s progress is expected to further increase China’s influence in Pakistan.

China and India have not demarcated their borders in areas such as Kashmir and Arunachal Pradesh. As China and Bhutan, which has close relations with India, have claimed territorial rights over the Doklam Plateau, Chinese and Indian military forces staged a standoff at the plateau from June to August 2017. On the other hand, it has been pointed out that China has recently striven to improve its relationship with India, while giving consideration to a balance between its relations with Pakistan and India. Because China identifies the relationship with India as a strategic partnership, the leaders of the two countries actively conduct mutual visits. In December 2018, China and India resumed their “Hand in Hand” bilateral anti-terrorism drill that had been suspended since the Doklam standoff. The background for progress in China’s relations with India seems to include an emphasis on economic growth of the two countries and a response to closer U.S.-India relations. Amid such a situation, in May 2020, a clash

²⁹ According to the website of the Ministry of Foreign Affairs of the Philippines on April 4, 2019

between Indian and Chinese forces occurred in the China-India border area in Ladakh, India. The incident that occurred on June 15, 2020, resulted in a deadly clash for the first time in 45 years and raised tensions between the two countries. In September 2020, foreign ministers of China and India had a meeting in Moscow and agreed to continue having dialogues for the China-India border dispute.

In recent years, China has also been deepening its relations with Sri Lanka. Initially after taking office, President Maithripala Sirisena, who won the election in January 2015, suspended the Colombo Port City development projects financed by China. However, he subsequently announced the resumption of the projects in January 2016, and new development projects with China have also been showing progress. In July 2017, an agreement was reached to lend interests to Chinese enterprises at the Port of Hambantota, which was being constructed with Chinese loans. Some have noted that these moves constitute what has been described as a “debt trap.” Additionally, China is deepening its relations with Bangladesh through its port development in Chittagong where a naval base is located, arms exports, and other deals.

(4) Relations with European Countries

For China, the European Union (EU) countries have become an important partner especially in the economic field.

European countries possess more advanced military technologies than China or Russia regarding information and communication technology, avionics/aeroengines, air independence propulsion (AIP) systems for submarines, and other areas. The EU countries have maintained their arms embargo on China since the Tiananmen Square incident in 1989 and China has requested them to lift the embargo.³⁰ If the EU arms embargo on China were lifted, sophisticated military technologies could be transferred to China and to third countries via China, dramatically changing the security environment in the Indo-Pacific and other regions.

Additionally, China and Ukraine have close ties in the field of arms procurement, as indicated by China’s purchase of the unfinished Ukrainian Kuznetsov-class aircraft carrier “Varyag,” which was the basis of the aircraft carrier “Liaoning.” Therefore, the relationship between these two countries will attract attention going forward.

China’s recent rise has attracted attention from the NATO as well. The London declaration adopted at a NATO summit conference in December 2019 referred to China’s growing influence as both “opportunities and challenges” and noted necessity to address China as an

Alliance. After the summit, NATO Secretary General Jens Stoltenberg mentioned China’s deployment of numerous intermediate-range missiles and noted that NATO was considering how China could be included in future arms control.

China’s relations with European countries, including EU discussions on the arms embargo on China and NATO’s China policy related to future arms control, should be continuously watched.

(5) Relations with Middle East and African Countries, Pacific Island countries, and Central and South American Countries

China has been enhancing its relations with Middle Eastern and African nations in the economic realm. In recent years, it has also strengthened military relations with them. Not only intensive interactions among state leaders and senior military officials but also arms exports and exchanges between military forces are actively conducted. China also actively dispatches personnel to undertake UN PKO in Africa. Some suspect that underlying these movements could be China’s aim to ensure a stable supply of natural resources and to secure overseas bases in the future. In December 2016, São Tomé and Príncipe severed diplomatic relations with Taiwan and re-established relations with China, followed by Burkina Faso in May 2018.

China is Australia’s biggest trade partner. However, there has been economic friction between the two countries such as China’s successive restriction on importing Australian beef and other goods since Australia suggested the necessity for independent investigation into the origin of COVID-19. China has also been boosting its relations with Pacific island countries by providing them with proactive and continuous economic support and medical services deploying a military hospital ship. China has promoted resources development in Papua New Guinea and signed an agreement with the island country on military cooperation. China has also been moving to enhance military relations with Vanuatu, Fiji, and Tonga. While China has been enhancing relations with Pacific island nations, Australia and some other countries have expressed concerns about such Chinese moves. In September 2019, the Solomon Islands and Kiribati severed diplomatic relations with Taiwan and established such relations with China.

China has been striving to further deepen its relations with Central and South American countries, holding ministerial meetings with the Community of Latin American and Caribbean States (CELAC) since 2015. In the military field, China has dispatched senior officials

³⁰ According to the policy paper on the EU released by China in December 2018

and sold arms to these countries and enhanced relations with them in medical services, counterterrorism and other areas. In Argentina, China operates an outer space observation facility. In June 2017, Panama severed diplomatic relations with Taiwan and established such relations with China, followed by the Dominican Republic in May 2018 and by El Salvador in August 2018.

5 International Transfer of Weapons

China has been expanding exports of weapons such as small arms, tanks, aircraft including drones, and ships. China's major arms export destinations include Pakistan, Bangladesh and Myanmar. China has also

been reportedly exporting arms to Algeria, Tanzania, Nigeria, Sudan, and other African countries, Venezuela and other Latin American countries, and Iran, Saudi Arabia, and other Middle Eastern countries. Recently, Serbia has been reported likely to become the first European country to introduce Chinese UAVs. Some claim that China has transferred weapons to foreign countries in order to strengthen its strategic relationships with friendly nations, enhance its influence in the international community, and secure natural resources. China has not participated in some of the frameworks for international arms export control, and some point out that missile-related and other technologies have been transferred from China to other countries.

Section 3

Relations between the United States and China, etc.

1 Relations between the United States and China (General Situation)

With regard to the relationship between the United States, the world's largest economic power (GDP approximately US\$20,932.8 in 2020¹), and China, the second largest in the world (GDP approximately US\$14,722.8 in 2020²), competitions between the two countries across the political, economic and military realms have become increasingly apparent in recent years. This is due to various concerns such as changes in the balance of power caused by China's growing national power, trade issues, issues concerning the South China Sea, the Taiwan issue, the Hong Kong issue, and human rights issues in China regarding Uighur and Tibet. In particular, since the former Trump administration, the moves of the United States and China that keep each other in check have come to the surface even more, attracting strong attention. In January 2021, the government of the United States declassified and released part of the "U.S. strategic framework for the Indo-Pacific," approved by the president in February 2018. This document functioned as comprehensive strategic guidelines for implementing the national security strategy during the three years of the former Trump administration, and states as national security challenges "how to maintain U.S. strategic primacy [...] while preventing China from establishing new, illiberal spheres of influence." In considering efforts to tackle the challenges, the United States expresses the view in the document that "China aims to dissolve U.S. alliances and partnerships in the region. China will exploit vacuums and opportunities created by these diminished bonds." As efforts towards China developed by taking these points into consideration, the following objectives are listed: preventing China from distorting global markets and harming U.S. competitiveness; maintaining American industry's innovation edge vis-à-vis China; deterring China from using military force against the United States and U.S. allies or partners, and developing the capabilities and concepts to defeat Chinese actions across the spectrum of conflict. Particularly, in terms of the military aspect, it is stated in the document that the United States aims to be capable of "denying China sustained air and sea dominance inside the 'first island chain' in a conflict" and "defending the first-island-chain nations, including Taiwan." Regarding trade issues, the former Trump administration had been taking a tough

stance on China since June 2018 through such measures as the phased raising of tariffs, on the grounds of China's unfair trade practices over many years. China has also responded with countermeasures such as the phased raising of tariffs. In January 2020, however, the United States and China reached the Phase 1 deal, which places China's expansion of import volumes from the United States as a pillar, and the two countries also reduced some additional tariffs.

Concerning sensitive technologies and important technologies, the United States is elevating a sense of vigilance against China. In the National Security Strategy, the United States positions economic security as part of national security, and is devoting energy into the protection and development of sensitive and important technologies. For example, concerning 5G, the law aiming to prohibit certain federal subsidies from being used to purchase communications equipment or services posing national security risks, and to remove these communications equipment or services from the U.S. network was enacted in March 2020. In May of the same year, the United States Department of Commerce announced a new rule that would impose further restrictions on Chinese Huawei. Moreover, in the same month, the U.S. Department of Defense released the Department of Defense (DoD) 5G Strategy based on the National Strategy to Secure 5G, which was released by the White House in March 2020. This DoD strategy states that 5G is a critical strategic technology, which has an impact on gaining a long-term economic and military advantage. It also mentions that the United States will make efforts to promote technology development and mitigate 5G vulnerabilities, while leveraging U.S. allies and partner collaborations. Meanwhile, China, in its 2019 Defense White Paper, states that "the US is engaging in technological and institutional innovation in pursuit of absolute military superiority." At the same time, the report also expresses the view that "the application of cutting-edge technologies such as artificial intelligence (AI) [...] is gathering pace in the military field," and "International military competition is undergoing historic changes." Furthermore, at the Fifth Plenary Session of the 19th Central Committee of the Chinese Communist Party in October 2020, China emphasized the importance

1 According to the published figures of IMF (as of April 2021)

2 Ibid.

of recognizing self-reliance and self-strengthening of science and technology as the strategic support to the country's development and stressed the necessity to uphold the system and mechanism of science and technology innovation.

The United States also implemented a measure to place visa restrictions on certain Chinese persons and add Chinese firms to its Entity List, which restricts the export from the United States, for reasons such as stealing American trade secrets, involvement in human rights abuses, and militarization activities in the South China Sea. In response to the U.S. measures, China established the same Entity List system as the United States and passed the Export Control Law of the People's Republic of China for controlling the export of technologies related to the national security and interest. As further pushing back against the United States measures, in January 2021, China passed new rules to protect its firms from "unjustified extra-territorial application of foreign legislation and other measures."

Furthermore, in July 2020, the United States ordered

the closure of Chinese consulate in Houston, Texas, due to its involvement in the act of stealing intellectual property. China, in response to the U.S. order, also ordered the United States to close its consulate in Chengdu, and expressed that the current situation between the two countries was not intended by the Chinese side, and that the entire responsibility was on the U.S. side.

Since the inauguration of the Biden administration, in light of the remarks by a high-level official of the U.S. Department of Defense that the issue of technology competition is clearly increasing its importance in the U.S.-China relationship, the competition in the technology field between the two countries is likely to intensify further.

While China emphasizes its uncompromising stance on the country's core interests and significant concerns, the United States indicates an uncompromising stance on its national security. Going forward, it is deemed that the strategic competition between the United States and China will become more prominent in various fields.

2 Military Trends of the United States and China in the Indo-Pacific Region

1 General Situation

During the former Trump administration, the United States indicated that the re-emergence of long-term strategic competition from revisionist powers including China was a central challenge to its prosperity and security. With this as a backdrop, the United States recognizes that China is pursuing regional hegemony in the Indo-Pacific in the near future through the modernization of its military and other efforts.³ It is viewed that the Biden administration will basically continue with taking the deterrence stance against China. In February 2021, President Biden, in his address on diplomatic policies, called China "most serious competitor" of the United States, and then in his remarks to the Department of Defense in the same month mentioned that the United States would need to respond to the issues brought by China for defending its interest in the Indo-Pacific and around the world. In the same remarks, President Biden also talked about a new China task force within the Department of Defense and announced that the task force would provide recommendations to Defense Secretary Austin on key priorities and decision points within the next few months. Furthermore, in March 2021, the United States released its Interim National Security Strategic Guidance in which it describes China as "the only competitor potentially capable of combining its

economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system" At the congressional hearing held in the same month, the Commander of the U.S. Indo-Pacific Command (USINDOPACOM) Phil Davidson described the military balance in the Indo-Pacific as not desirable to the United States and its allies, and pointed out the growing risk of China seeking to change the status quo in the region. He testified that China was accelerating its ambitions for taking the U.S.'s leading role in a rules-based global order, and that China's ambitions for Taiwan would become clear within the next six years. In response to such a U.S. perception, China expressed that it expects the United States to abandon the outdated zero-sum thinking and take more rational and practical policies towards China.

At the 19th National Congress of the Chinese Communist Party in October 2017, China mentioned its plan to transform Chinese forces into world-class forces by the mid-21st century as the goal to modernize national defense and military forces, and has been rapidly developing its military power. Although China has not clearly shown the definition of the "world-class forces," the United States, in the Department of Defense Annual Report to Congress 2020, views that China may aim to build a military that has parity with or in some cases

³ According to "United States National Defense Strategy" (January 2018)

may exceed the U.S. Forces. Regarding such China's military power, this report also points out that the People's Liberation Army (PLA) has already exceeded the United States in some areas including the number of ships owned and the number of land-based conventional ballistic missiles, and that the number of warheads on China's "land-based ICBMs capable of threatening the United States is expected to grow to roughly 200 in the next five years."

In relation to the U.S.-Russia Intermediate-Range Nuclear Forces (INF) Treaty, which came to an end in August 2019, the United States demands the inclusion of China into arms control negotiations, as China has beefed up land-based conventional ballistic missile capabilities outside the framework of the INF Treaty. In addition, the United States expressed the same view in the process of the extension negotiation of the New START Treaty (Strategic Arms Reduction Treaty), of which the extension was decided in February 2021, clearly showing its intention to put a certain degree of brake on China's missile capability development. However, China has been consistently refusing⁴ to slow down, claiming that the United States should lead the implementation of disarmament.

The United States has reiterated that the Article 5 of the Japan-U.S. Security Treaty applies to the Senkaku Islands. This was confirmed in February 2017, in the joint statement from the first Japan-U.S. summit meeting since the inauguration of the former Trump administration, which explicitly referred to the application of Article 5 of the Treaty to the Senkaku Islands. The U.S. policy on this matter remains the same and has been confirmed since the inauguration of the Biden administration through summit telephone talks, defense ministerial meetings, foreign ministerial meetings, and the Joint Statement of the Japan-U.S. "2+2" Meeting in March 2021. China has shown its strong protest against these stances. With regard to the issues over the South China Sea, the United States is concerned about such dimensions as obstruction to the freedom of navigation in sea lanes, restrictions on the activities of U.S. Forces, and the worsening security situation in the entire region. The United States has requested China comply with international norms, and has repeatedly criticized China's unilateral and assertive actions. And the United States also implements the Freedom of Navigation Operation in the South China Sea and other waters to counter excessive claims to maritime interests by other countries such as China and calls for demilitarizing the South China Sea.

In this way, while China is rapidly strengthening

military power against the backdrop of its economic development and other factors, changes in the military power balance between the United States and China can affect peace and stability of the Indo-Pacific. Thus, the U.S.-China military trends in the region concerning the South China Sea and Taiwan will require further attention.

2 South China Sea

Since 2014, China implemented rapid and large-scale land reclamation projects in the Spratly Islands. Following the completion of the land reclamation in 2015, even after the illegality of the Chinese activities such as land reclamation was determined at the Philippines-China arbitration in July 2016, China has made it clear that it would not comply with the decision and has been promoting its plan to militarize the area.

China has also been actively conducting military activities in the South China Sea including conducting military exercises in the Spratly Islands in July 2020, reportedly launching a Medium Range Ballistic Missile (MRBM) in August of the same year, and also carrying out military exercises with aircraft carriers in December of the same year.

Moreover, China utilizes not only its military forces but also the Coast Guard, which is a "maritime law enforcement organization" in the Coast Guard law, and so-called maritime militia to increase pressure on the neighboring countries. In the area surrounding Thitu Island, which is under the effective control of the Philippines, as of March 2020, China had been continuously carrying out activities for more than 450 days. It is noted that, as a result of those Chinese activities, the progress of the Philippines' renovation plan of the island was delayed.⁵ Meanwhile, in Scarborough Shoal, of which China took effective control, Chinese Coast Guard vessels had been operating nearly 300 days in a year since December 2019, which is pointed out as a significant increase compared to the previous year.⁶ Despite the spread of the COVID-19 infectious disease, China seems to be increasing its presence in the South China Sea. Furthermore, in April 2020, a Chinese Coast Guard ship rammed and sunk a Vietnamese fishing boat near the Paracel Islands, while in May 2020, a Coast Guard ship interfered with Filipino fishermen's operations. In this way, there have been cases that interfered with fishery activities of the neighboring countries in the South China Sea. In February 2021, the China Coast Guard Law, which stipulates the responsibility and authority of the China Coast Guard including the use of weapons, entered into

⁴ According to the website of the Ministry of Foreign Affairs of China on December 11, 2019

⁵ ASIA MARITIME TRANSPARENCY INITIATIVE MARCH 5, 2020

⁶ ASIA MARITIME TRANSPARENCY INITIATIVE DECEMBER 4, 2020

force. This Law includes problematic provisions in terms of their inconsistency with international law. Sources of inconsistency include, among others, ambiguity as to geographical areas the Coast Guard Law applies and how the rules governing the use of weapons are implemented, and neighboring countries started expressing concerns about Chinese moves. The Philippines announced that its Minister of Foreign Affairs had protested against the CCG Law through a diplomatic route. Furthermore, in Vietnam a foreign ministry spokesperson commented that, “Vietnam requests relevant countries that they respect Vietnam’s sovereignty, sovereign rights, and jurisdiction in the South China Sea, responsibly and faithfully enforce international laws and the United Nations Convention on the Law of the Sea, and avoid behavior that raises tension between countries.”

With regard to the issues over the South China Sea, the United States has been criticizing China’s behavior and implementing the Freedom of Navigation Operations. Since the former Trump administration, the United States has been demonstrating more severe stance against such moves by China.

In July 2020, the United States released a U.S. Secretary of State’s statement entitled “U.S. Position on Maritime Claims in the South China Sea,” and accused China of illegal maritime claims across most areas of the South China Sea. In August of the same year, the U.S. Department of State announced visa restrictions on Chinese individuals as a sanction against China’s militarization activities in the South China Sea. In this announcement, a high-level official of the Department of State mentioned that this sanction was only the beginning of imposing many other means against China’s malign activities in the South China Sea. On the same day, the United States Department of Commerce announced that it had added 24 Chinese firms to the Entity List for the reasons that they had supported the PLA constructing artificial islands and conducting militarizing activities in the South China Sea. Since the inauguration of the Biden administration, the United States has continued to show its consistent deterrence stance against China. For example, U.S. Secretary of State Blinken stated that the United States would reject China’s claims about maritime interests in the South China Sea, and stand up together with Southeast Asian countries facing China’s pressure.

The United States has sought to enhance military efforts in the South China Sea. It has frequently conducted the Freedom of Navigation Operations, carried out joint exercises in July 2020 by deploying two Carrier Strike Groups for the first time since 2014, and even after President Biden took office, in February 2021, once again conducted similar exercises. The United States has also conducted exercises with Japan, Australia and other

partner countries. Responding to these American efforts, China has criticized the United States for hindering the peace and stability of the region.

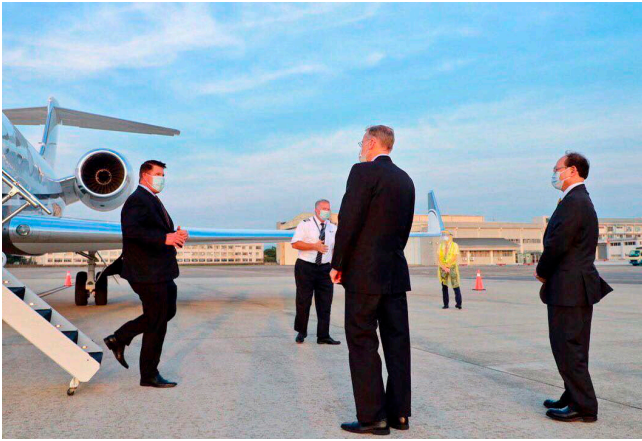
Going forward, while forming free and open order based on the rule of law is important in the South China Sea, the military tensions may rise. Japan, which promotes the vision of a “Free and Open Indo-Pacific” with the United States, will have to pay great attention to the situation.

3 Taiwan

China upholds the principle that Taiwan is a part of China and that the Taiwan issue is a domestic one. China maintains that the “One China” principle is the underlying premise and foundation for dialogue between China and Taiwan. China is strongly opposed to any foreign intervention in the unification of China as well as any move towards the independence of Taiwan and has repeatedly stated that it has not renounced the use of force. “The Anti-Secession Law,” enacted in March 2005, clearly lays out China’s policy of not renouncing the use of force, providing that in the event that possibilities for a peaceful reunification should be completely exhausted, the state shall employ nonpeaceful means and other necessary measures to protect China’s sovereignty and territorial integrity.

On the other hand, conventionally, the United States has been promoting its policy on Taiwan based on the Taiwan Relations Act, the U.S.-China Joint Communique, and six assurances, and does not intend to change its approach to the “One China” principle. However, since the former Trump administration, the U.S. government has been expressing the stance to deepening its involvement in the situation surrounding Taiwan. In the Indo-Pacific Strategy Report (IPSR) of the U.S. Department of Defense released in June 2019, the intention of the United States to pursue a strong partnership with Taiwan is mentioned. The United States, in the U.S. Strategic Framework for the Indo-Pacific, which was released by the White House in January 2021, states that it enables “Taiwan to develop an effective asymmetric defense strategy,” while also aiming for the United States to be capable of “defending the first-island-chain nations, including Taiwan.”

The United States has made decisions to sell arms to Taiwan under the Taiwan Relations Act. Since President Trump took office in 2017, 11 such decisions have been made. In 2019, the president notified Congress of its plan to sell such weapons as 66 F-16C/D Block 70 fighters to Taiwan, the first U.S. fighter sales to Taiwan in the 27 years since 1992. From October to November 2020, the United States also notified Congress in swift succession



Then Under Secretary for Economic Growth, Energy, and the Environment Krach arriving in Taiwan on his personal aircraft [Website of the Ministry of Foreign Affairs of Taiwan]

of the plan to sell the High Mobility Artillery Rocket System (HIMARS), long range air-to-surface missiles, and surface-to-ship missiles. In addition, the United States has frequently sent its vessels to pass through the Taiwan Strait.

The United States has also demonstrated its stance on more active implementation of visits of U.S. high-level government officials to Taiwan. U.S. Secretary of Health and Human Services Alex Azar and U.S. Under Secretary of State Keith Krach visited Taiwan in August and September 2020 respectively, and in January 2021, U.S. Secretary of State Pompeo announced the removal of restrictions on contacts between U.S. officials and their Taiwanese counterparts, which had been in place voluntarily in consideration of the Chinese government.

With regard to the United States, not only the government but also Congress has indicated its intention to further enhance support for Taiwan. The Asia Reassurance Initiative Act, passed in December 2018, stipulates regular transfers of defense articles to Taiwan and encouragement of the travel of high-level U.S. officials to Taiwan. Similarly, the Taiwan Allies International Protection and Enhancement Initiative (TAIPEI) Act, enacted in March 2020, stipulates the promotion of regular transfers of defense articles to Taiwan. The TAIPEI Act also includes the encouragement for the U.S. government to provide support for “altering its economic, security, and diplomatic engagement with nations that take serious or significant actions to undermine the security or prosperity of Taiwan” and for advocating Taiwan’s participation and membership in international organizations.

China has further intensified military activities around Taiwan. In particular, according to Taiwan’s Ministry of Defense, Chinese aircraft’s entering the Taiwanese side of the China-Taiwan “median line” of the Taiwan Strait and the southwestern airspace of Taiwan have been increasing since September 2020, and a total of approximately 380 Chinese military aircraft entered the southwestern airspace of Taiwan during 2020. In the same year, ships of the Chinese military forces including aircraft carriers passed through the Bashi Channel and conducted exercises. Due to these increasing military activities by China in the vicinity of Taiwan and the response from the Taiwanese side to the situation, the possibility of military tension between China and Taiwan to become further heightened cannot be denied.

These trends between the United States and China are expected to continue during the Biden administration. The United States invited a representative of the Taipei Economic and Cultural Representative Office in the United States to the inauguration ceremony of President Biden for the first time since 1979 when the country broke off diplomatic relations with Taiwan. In addition, the United States has repeatedly made remarks requesting China that it should stop imposing pressure on Taiwan in military and other areas, including at summit meetings and foreign ministers’ meetings. Furthermore, the United States is sending U.S. vessels to pass through the Taiwan Strait, while China has strongly protested against the U.S. moves. China deployed more than 10 Chinese military aircraft to enter the southwestern airspace of Taiwan for the second straight day in January 2021, and in the same month, some Chinese media reported that Chinese military aircraft flying in the vicinity of Taiwan had already “become normal,” and these aircraft would appear over Taiwan in the not-so-distant future. While the Biden administration is clarifying its stance of supporting Taiwan in the military-related area, in the same way as the former Trump administration, it is deemed unlikely that China, which position Taiwan as its core interests, will show a compromising attitude towards the U.S. stance. It is viewed that the U.S.-China conflict over Taiwan may become more apparent. Stabilizing the situation surrounding Taiwan is important not only for Japan’s security but also for the stability of the international community. Therefore, it is necessary that we pay close attention to the situation with a sense of crisis more than ever before.

3 Military Capabilities of Taiwan and Military Balance between China and Taiwan

1 Relations with China

Taiwanese President Tsai Ing-wen from the Democratic Progressive Party, who took office in 2016, has noted that she has never accepted the “1992 Consensus” that China claims as embodying the “One-China” principle.⁷ In response, China has criticized the Democratic Progressive Party for destroying the political foundation of the peaceful development of cross-Strait relations by rejecting the “1992 Consensus” unilaterally, emphasizing that the maintenance of the “1992 Consensus” would be the unshakable foundation for peace and stability of cross-Strait relations.

In a January 2019 speech at an event commemorating the 40th anniversary of China’s “Message to Compatriots in Taiwan,” General Secretary Xi Jinping advocated a five-point proposal for managing relations with Taiwan, stating “the specific form of the ‘one country, two systems’ model in Taiwan will give full consideration to the situation in Taiwan.” In her immediate response to the speech, President Tsai issued a statement firmly rejecting the “one country, two systems” model and called for negotiations between “government-authorized agencies.” After winning re-election with the highest ever number of votes in a Taiwanese presidential election in January 2020, President Tsai told a press conference the election results represented the value of Taiwanese people and rejected the “one country, two systems” model. In a manner to check the Taiwanese side, China noted that regardless of how the Taiwanese situation changed, there would be no change to the basic fact that there is only one China in the world, with Taiwan being a part of China.

Since around the inauguration of President Tsai for her first term, Taiwanese delegates were refused attendance at or had their invitations deferred from meetings held by international organizations, including ones in which they had participated up to that point.⁸ As the Solomon Islands and Kiribati severed diplomatic relations with Taiwan and established such relations with China in September 2019, the number of countries having diplomatic relations with Taiwan declined to 15 from 22 in May 2016, when President Tsai took office. Taiwan is strongly protesting these actions, claiming them to be “actions taken by China that compress the international space of Taiwan.”

2 Taiwan's Military Power

Since China has consistently expressed its intention of not renouncing the use of force to Taiwan, the country may make a decision on military options such as air and maritime blockade, limited use of force, air and missile operations, and invasion of Taiwan. If that happens, it is deemed that China will deter or delay any potential U.S. interventions. In response to such moves of China, Taiwan under President Tsai Ing-wen has put forth defense visions to prevent the invasion from China at the farthest points possible within its territory with a multi-layered defense posture, which combines major equipment such as fighters and vessels with asymmetric force. It is assumed that these defense visions aim to delay the invasion of the PLA to buy some time until the intervention of the U.S. Forces. The Taiwan National Defense Report 2019, released in September 2019 as the second such report under President Tsai, followed these visions and clarified Taiwan as an important security partner to the United States in the Indo-Pacific region.

In March 2021, Taiwan also released the Quadrennial Defense Review (QDR), which is the fourth review since 2009. This report aims to present the national defense strategy and military power development policy for the next four years to contribute to strengthening the national defense. In the report, Taiwan assesses China’s military threat and states that China is improving operational capabilities through landing exercises assuming an invasion of Taiwan and the implementation of gray-zone strategies, while maintaining capabilities for the blockade of waters around the Taiwan Strait and Anti-Access/Area-



The first mass-produced corvette “Ta Chiang” [Website of the Taiwan Ministry of Defense Military News Agency]

⁷ The “1992 Consensus” refers to what represents a common understanding reached between Chinese and Taiwanese authorities in 1992 on the “One-China” principle. The CCP and Taiwan’s Kuomintang Nationalist Party (Taiwan’s ruling party at the time), viewed as parties to the consensus, have reportedly differed over the interpretation of the consensus. In addition, Taiwan’s Democratic Progressive Party has clarified that it has not accepted the “1992 Consensus.”

⁸ According to the website of the Ministry of Foreign Affairs of Taiwan on September 24, 2019

Denial (A2/AD). Based on the evaluation, Taiwan intends to enhance its defense capabilities by enhancing long-range weapons and asymmetric forces and developing surveillance capabilities, while Taiwan utilizes new technologies such as big data analysis, and cooperates with the Navy and the Coast Guard Administration in order to deal with China's gray-zone situations.

Taiwan adopted conscription in 1951, but it has been switching to a volunteer system mainly to improve the expertise of its military personnel, and the last of the conscripts were enlisted by the end of 2018. However, the obligation to undergo four months of military training is being maintained and Taiwan's Ministry of Defense describes the Taiwanese system of military service as a dual-track mix of conscripts and volunteers.

With regard to Taiwan's military power, at present, ground forces, including the Navy Marine Corps, have a total of approximately 100,000 personnel. In addition, it is assessed that approximately 1.66 million reserve personnel of the air, naval, and ground forces would be available in case of war. Regarding naval capabilities, in addition to Kidd-class destroyers which were imported from the United States, Taiwan possesses the indigenously built "Tuo Chiang" stealth corvette, among other vessels. Regarding air capabilities, Taiwan possesses F-16 (A/B and C/D) fighters, Mirage 2000 fighters, Ching-kuo fighters, and other assets.

3 Military Balance between China and Taiwan

While China has continued to increase its defense budget by a significant margin, Taiwan's defense budget, at approximately 361.8 billion Taiwan dollars for FY2021, has remained almost unchanged for nearly 20 years. China's announced military budget in FY2021 totals approximately 1,355.3 billion yuan, roughly 16 times the amount of Taiwan's in terms of U.S. dollars based on exchange rates announced by the Taiwanese Central Bank. It is pointed out that China's actual defense expenditure has been larger than the published defense budget, indicating that the China-Taiwan defense expenditure gap could be greater. Amid this situation, President Tsai has ordered an increase in Taiwan's defense budget.

In the National Defense Report 2019, Taiwan acknowledges that China is currently only capable of conducting joint landing operations to take over "Taiwan's offshore islands," while also assessing that China already possesses early warning capability on the western side of the so-called second island chain, and the ability to implement air and maritime blockade operations in the vicinity of the Taiwan Strait. It also recognizes that China is drastically tilting the cross-Taiwan Strait military balance to its favor, "posing a serious threat to our (Taiwan's) national defense and security."

While the PLA proceeds to expand its missile, naval,

Fig. I-2-3-1 Comparison of China and Taiwan Military Forces

		China	Taiwan
Total military forces		Approx. 2.04 million troops	Approx. 0.16 million troops
Ground forces	Ground troops	Approx. 0.97 million troops	Approx. 90,000 troops
	Tanks, etc.	Type-99/A, Type-96/A, Type-88A/B and others Approx. 6,000 vehicles	M-60A, M-48A/H and others Approx. 700 vehicles
Maritime forces	Warships	Approx. 730 vessels 2,120,000 tons	Approx. 250 vessels Approx. 205,000 tons
	Aircraft carriers, destroyers, and frigates	Approx. 90 vessels	Approx. 30 vessels
	Submarines	Approx. 70 vessels	4 vessels
	Marines	Approx. 40,000 troops	Approx. 10,000 troops
Air forces	Combat aircraft	Approx. 2,900 aircraft	Approx. 520 aircraft
	Modern fighter aircraft	J-10 × 488 Su-27/J-11 × 329 Su-30 × 97 Su-35 × 24 J-15 × 34 J-16 × 150 J-20 × 24 (Fourth and fifth generation fighters (total): 1,146)	Mirage2000 × 55 F-16 × 143 Ching-kuo × 127 (Fourth generation fighters (total): 325)
Reference	Population	Approx. 1.402 billion	Approx. 23 million
	Term of service	2 years	The last conscripts were enlisted before the end of 2018. However, the obligation to undergo four months of military training is being maintained for those born in or after 1994.

Note: Data from "The Military Balance 2021," etc.

and air forces, the Taiwan military is struggling in the modernization of its equipment.

The military capabilities of China and Taiwan are generally characterized as follows:

- (1) Regarding ground forces, while China possesses an overwhelming number of troops, its capability of landing and invading the island of Taiwan is limited at present. In recent years, however, China has been steadily improving its landing and invasion capabilities by building large amphibious ships.
- (2) Regarding naval and air forces, China, which overwhelms Taiwan in terms of quantity, has also been rapidly strengthening its naval and air forces in recent years in terms of quality, where Taiwan used to have superiority over China. In this situation, Taiwan focuses on developing asymmetric forces including stealth corvettes.
- (3) Regarding missile attack capabilities, Taiwan has been strengthening its ballistic missile defense, upgrading the PAC-2 to the PAC-3 and introducing the PAC-3. However, China possesses numerous short-range ballistic missiles and other assets with ranges covering Taiwan. Taiwan is deemed to lack effective countermeasures.

Comparison of military capabilities should be made based not only on the troop strength and the performance and quantity of equipment but also on various other factors such as the purpose and aspects of assumed military operations, operational arrangements, the skill

level of personnel, and logistics. Nevertheless, the overall military balance between China and Taiwan is tilting to China's favor, and the gap appears to be growing year by year. Going forward, attention needs to be paid to trends such as the strengthening of Chinese and Taiwanese forces, the sale of weapons to Taiwan by the United States, and Taiwan's own development of its main military equipment.



Fig. I-2-3-1 (Comparison of China and Taiwan Military Forces)
 Fig. I-2-3-2 (Changes in Taiwan's Ministry of National Defense Budget)
 Fig. I-2-3-3 (Changes in the Number of Modern Fighter Aircraft of China and Taiwan)

Fig. I-2-3-2 Changes in Taiwan's Ministry of National Defense Budget

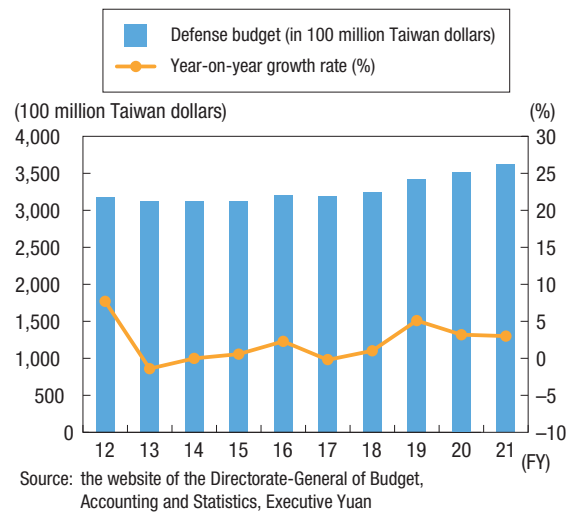
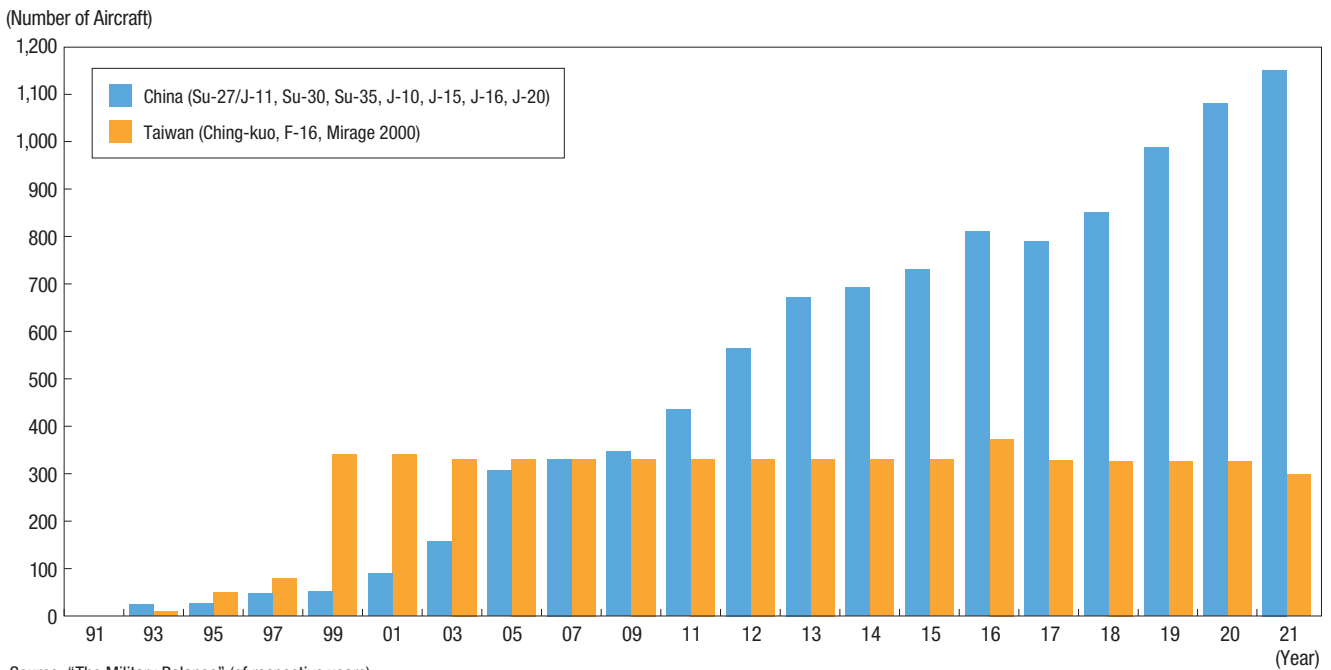


Fig. I-2-3-3 Changes in the Number of Modern Fighter Aircraft of China and Taiwan



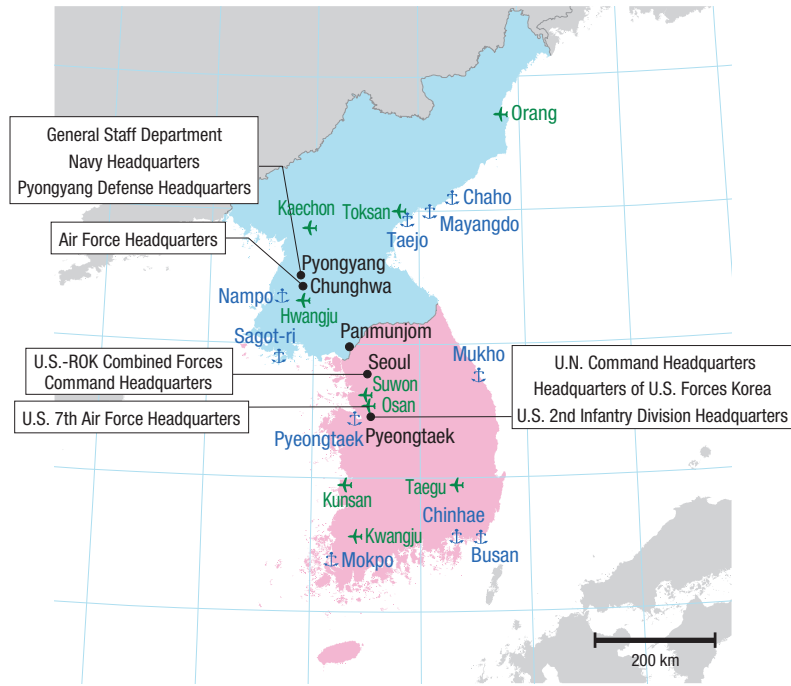
Section 4 Korean Peninsula

On the Korean Peninsula, people of the same ethnicity have been divided into two—north and south—for more than half a century. Even today, the ROK and North Korea pit their ground forces of about 1.6 million against each other across the demilitarized zone (DMZ).

Peace and stability on the Korean Peninsula under such security environment is an extremely important challenge not only to Japan but also to the entire region of East Asia.

 Fig. I-2-4-1 (Military Confrontation on the Korean Peninsula)

Fig. I-2-4-1 Military Confrontation on the Korean Peninsula



		North Korea	ROK	U.S. Forces Korea
Total armed forces		Approx. 1.28 million personnel	Approx. 600,000 personnel	Approx. 30,000 personnel
Army	Ground troops	Approx. 1.1 million personnel	Approx. 460,000 personnel	Approx. 20,000 personnel
	Tanks	T-62, T-54/55, etc. Approx. 3,500	M-48, K-1, T-80, etc. Approx. 2,220	M-1A2SEPV2
Navy	Naval vessels	Approx. 800 110,000 tons	Approx. 230 260,000 tons	Supporting corps only
	Destroyers		12	
	Frigates	6	11	
	Submarines	25	17	
	Marines		Approx. 29,000 personnel	
Air Force	Combat aircraft	Approx. 550	Approx. 640	Approx. 80
	Third, fourth and fifth generation fighters	MiG-23 × 56 MiG-29 × 18	F-4 × 30 F-16 × 162 F-15 × 59 F-35 × 24	F-16 × 60
Reference	Population	Approx. 25.64 million	Approx. 51.84 million	
	Term of service	Men: 10 years Women: 7 years	Army: 18 months Navy: 20 months Air Force: 21 months	

Note: 1. Data from "The Military Balance 2021," etc.
 2. ROK is reducing the mandatory military service period in stages from 2018 to 2021.

1 North Korea

1 General Situation

At the Plenary Meeting of the Central Committee of the Korean Workers' Party (KWP) in March 2013, Chairman Kim Jong-un¹ adopted the “Byungjin line” policy of simultaneous economic and nuclear development. At the 7th Congress of the KWP in May 2016, he made it clear that he would uphold the “Byungjin line” as well as the “Songun politics.”² Between 2016 and 2017, North Korea pushed ahead with three nuclear tests and as many as 40 ballistic missile launches. The international community responded by imposing sanctions under relevant UN Security Council resolutions, while Japan and the United States were among those who strengthened their own sanctions against North Korea.

On the other hand, at the Plenary Meeting of the Central Committee of the KWP in April 2018, Chairman Kim declared that the “Byungjin line” had been successfully carried out as the development of the state nuclear force had been completed. He also announced that the KWP’s “new strategic line” was that the whole of the party and the whole of the state will fully concentrate efforts on the construction of a socialist economy. In addition, North Korea decided to discontinue “nuclear test and inter-continental ballistic rocket test-fire,” announcing in May 2018 that the nuclear test ground had been blown up. During the U.S.-North Korea summit meeting that June, Chairman Kim expressed the intention to work towards denuclearization of the Korean Peninsula.

However, the February 2019 U.S.-North Korea summit meeting ended without any agreement being reached between the two parties. At the December 2019 Plenary Meeting of the Central Committee of the KWP, Chairman Kim stated that, since the United States was holding U.S.-ROK joint military exercises, there were no grounds for North Korea to be unilaterally bound any longer by a commitment that no other party honors. He also announced the intention to continue developing strategic weapons until the United States rolls back its hostile policy towards North Korea. At the 8th Congress of the KWP in January 2021, Chairman Kim showed a hostile attitude towards the United States and stated that North Korea’s external activities should focus on “prevailing over and subjugating the US,” which is “our principal enemy” Chairman Kim also mentioned that North Korea

“must further strengthen the nuclear war deterrent while doing our best to build up the most powerful military strength” to clarify the North Korea’s intention to continue engaging in the development of nuclear and missile capabilities. These remarks indicate that North Korea will continue to make efforts to maintain and enhance its military capabilities and combat readiness. According to the official announcement at the Supreme People’s Assembly in January 2021, the proportion of the defense budget in the FY2021 budget of North Korea was 15.9%. However, it is believed that this represents only a fraction of the real defense expenditures.

North Korea has continued to promote the development of weapons of mass destruction (WMDs) and ballistic missiles and the enhancement of its operation capabilities, including by conducting six nuclear tests so far and repeatedly launching ballistic missiles in recent years at an unprecedented frequency. Technologically, North Korea is considered to have already miniaturized nuclear weapons to fit ballistic missile warheads and possess the capability to launch an attack on Japan with a ballistic missile fitted with a nuclear warhead. In addition, North Korea is assessed to possess large-scale cyber units as part of its asymmetric military capabilities, engaging in theft of military secrets and developing capabilities to attack critical infrastructure of foreign countries. It also retains largescale special operation forces. In addition, North Korea has repeatedly used provocative rhetoric and behavior against relevant countries, including Japan.

Such military trends in North Korea pose grave and imminent threats to Japan’s security and significantly undermine the peace and security of the region and the international community.

Needless to say, North Korea’s possession of nuclear weapons cannot be tolerated. At the same time, sufficient attention needs to be paid to the development and deployment of ballistic missiles, the military confrontation on the Korean Peninsula, and the proliferation of WMDs and ballistic missiles by North Korea.

Partly because North Korea maintains its extremely closed regime, it is difficult to accurately capture the details and intentions of its behavior. However, it is necessary for Japan to pay utmost attention to them. As for North Korea’s abduction of Japanese nationals, utmost efforts continue to be made to realize the return of all abductees

1 As of 2013, Kim Jong-un held the position of the First Chairman of the National Defense Commission. At the Supreme People’s Assembly in June 2016, the National Defense Commission was renamed the State Affairs Commission, and Kim Jong-un assumed the position of Chairman of the State Affairs Commission. Reflecting this change, “Chairman of the State Affairs Commission” is used for the title of Kim Jong-un throughout this white paper.

2 In a written decision of the 7th Congress of the KWP, “Report on the Work of the KWP Central Committee” (May 8, 2016), it has been defined as a basic form of socialist politics that leads the great undertaking of socialism to victory by giving priority to the military forces in all activities under the principle of military first, and strengthening and relying on the actors in the revolution with the Korean People’s Army (KPA) acting as the central and main force.

to Japan as quickly as possible by close cooperation with related countries, including the United States.

2 Military Posture

(1) General Situation

North Korea has been building up its military capabilities in accordance with the Four Military Guidelines (extensive training for all soldiers, modernizing all military forces, arming the entire population, and fortifying the entire country).³

North Korea's military forces are comprised mainly of ground forces, with a total troop strength of roughly 1.28 million. While North Korea still maintains substantial military forces, its conventional forces are markedly inferior to those of the ROK's military and U.S. Forces Korea, and most of its equipment is outdated. Contributory factors to this situation include the reduction in military assistance from the former Soviet bloc due to the collapse of the Cold War structure, limitations on defense spending caused by the weak economy, and the rapid modernization of ROK's defense capability.

North Korea is thought to be attempting to compensate for its consequent disadvantage by focusing its efforts on building up its arsenal of WMDs and ballistic missiles. North Korea also has forces such as a large-scale special operations force that can conduct various operations ranging from intelligence gathering and sabotage, to guerrilla warfare. Moreover, North Korea seems to have many underground military related installations across its territory.

(2) Military Capabilities

The North Korean Army comprises about 1.10 million personnel, and roughly two-thirds of them are believed to be deployed along the DMZ. The main body of the army is infantry, but the army also maintains armored forces including at least 3,500 tanks and artillery. North Korea is believed to regularly deploy long-range artillery along the DMZ, such as 240 mm multiple rocket launchers and 170 mm self-propelled guns, which can reach cities and bases in the northern part of the ROK including the capital city of Seoul.

The Navy has about 800 ships with a total displacement of approximately 110,000 tons and is chiefly comprised of small naval vessels such as high-speed missile craft. Also, it has about 20 of the former model Romeo-class submarines, about 40 midget submarines, and about 140 air cushioned landing crafts, the latter two of which are

believed to be used for infiltration and transportation of the special operations forces.

The Air Force has approximately 550 combat aircraft, most of which are out-of-date models made in China or the former Soviet Union. However, some fourth-generation aircraft such as MiG-29 fighters and Su-25 attack aircraft are also included. North Korea has a large number of outdated An-2 transport aircraft as well, which are believed to be used for transportation of special operations forces.

In addition, North Korea has so-called asymmetric military capabilities, namely, special operations force whose size is estimated at 100,000 personnel.⁴ In recent years, North Korea is seen to be placing importance on and strengthening its cyber forces.⁵

 See Chapter 3, Section 3-2-3 (North Korea), p. 182

3 WMD and Ballistic Missiles

In recent years, North Korea has launched ballistic missiles at an unprecedented frequency, rapidly improving its operational capabilities, such as simultaneous launch and surprise attack. In addition, given the technological maturity obtained through a series of nuclear tests, North Korea is assessed to have already miniaturized nuclear weapons to fit ballistic missile warheads and possesses the capability to launch an attack on Japan with a ballistic missile fitted with the nuclear warhead.

These military trends in North Korea pose grave and imminent threats to Japan's security and significantly undermine the peace and security of the region and the international community. Additionally, such development poses a serious challenge to the entire international community with regard to the non-proliferation of weapons, including WMDs.

On the other hand, at the Plenary Meeting of the Central Committee of the KWP held on April 20, 2018, decisions were made to discontinue "nuclear tests and inter-continental ballistic rocket test-fire." In the subsequent inter-Korean summit meeting held on April 27 and in the U.S.-North Korea summit meeting held on June 12, North Korea expressed its intention to work towards denuclearization. Then, on May 24, international press representatives were invited to witness the destruction of the northern nuclear test ground.

However, North Korea has not yet carried out the dismantlement of all WMDs and ballistic missiles of all ranges in a complete, verifiable, and irreversible manner. Having repeatedly carried out ballistic missile launches

³ The Four Military Guidelines were adopted at the 5th plenary meeting of the 4th KWP Central Committee in 1962.

⁴ James Thurman, then Commander of the U.S. Forces Korea, stated, "North Korea possesses the world's largest special operations force of over 60,000" in his speech at the Association of U.S. Army in October 2012. Additionally, the 2020 Defense White Paper of the ROK notes about North Korea's Special operations force, "The forces are estimated at approximately 200,000 strong."

⁵ Regarding North Korean cyber attacks, see Chapter 3, Section 3.

in breach of relevant Security Council resolutions since May 2019, it seems that North Korea has been striving to develop more advanced technologies and operational capabilities in this field. Japan cannot possibly turn a blind eye to this series of missile launches, which is an issue of serious concern to the international community as well.

At the December 2019 Plenary Meeting of the Central Committee of the KWP, Chairman Kim stated that, since the United States was holding U.S.-ROK joint military exercises, there were no grounds for North Korea to be unilaterally bound any longer by a commitment that no other party fails to honor. He also announced the intention to continue developing strategic weapons until the United States rolls back its hostile policy towards North Korea.

Furthermore, North Korea held a military parade in October 2020 and January 2021, in which a possible new type of intercontinental ballistic missile-class (ICBM-class) ballistic missiles and a possible new type of submarine-launched ballistic missiles (SLBM) appeared.

At the 8th Congress of the KWP in January 2021, Chairman Kim asserted that “the hostile nature of the American policy towards the DPRK” had been strengthened, and showed the stance to continue to improve the military power of North Korea in order to deter the United States’ “military threat.” Chairman Kim also mentioned his intention to the development of “hypersonic gliding flight warheads” and so on, in addition to the advancement of nuclear technology, such as “tactical nuclear weapons development,” and preemptive and retaliatory nuclear strike capabilities, indicating further improvement of nuclear and missile capabilities.

Looking to the future, it will be necessary to continue to carefully monitor moves by North Korea, including what kind of concrete actions it will take towards the dismantlement of all weapons of mass destruction and ballistic missiles of all ranges in a complete, verifiable and irreversible manner.

(1) Nuclear Weapons

a. The Current Status of the Nuclear Weapons Program

Details of the current status of North Korea’s nuclear weapons program are largely unclear, partly because North Korea remains an extremely closed regime. In

light of the unclear status of past nuclear developments, and considering North Korea has already conducted six nuclear tests including the nuclear test in September 2017, it is conceivable that North Korea has made considerable progress in its nuclear weapons program.

With regard to plutonium, a fissile material that can be used for nuclear weapons,⁶ North Korea has suggested its production and extraction on several instances.⁷ As for recent activities, in September 2015, North Korea announced that all nuclear facilities in Yongbyon, including the nuclear reactor and the reprocessing facility, the disablement of which was agreed upon at the fifth and the sixth round of the Six-Party Talks in February and September 2007, respectively, had been readjusted and had started normal operation.⁸ Because the restarting of the reactor could lead to the production and extraction of plutonium by North Korea, those activities are causes of great concern.

As for highly enriched uranium that can also be used for nuclear weapons, in June 2009, North Korea declared the commencement of uranium enrichment. In November 2010, North Korea disclosed its uranium enrichment facility to American nuclear specialists and later announced that it was operating a uranium enrichment plant equipped with thousands of centrifuges. The expansion of this uranium enrichment plant has been suggested in August 2013; in this regard, North Korea could have increased its enrichment capabilities. The series of North Korean behaviors related to uranium enrichment indicate the possibility of the development of nuclear weapons using highly enriched uranium in addition to plutonium.⁹

Regarding these nuclear-related activities, some have pointed out about North Korea’s activities that are inconsistent with a “commitment to work towards complete denuclearization of the Korean Peninsula,” which North Korea insists that it upholds. For example, U.S. Secretary of State Pompeo testified in the Senate in July 2018 that North Korea was continuing to produce nuclear fuels, while at a meeting of the International Atomic Energy Agency (IAEA) Board of Governors, IAEA Director General Rafael Grossi mentioned in March 2021 that some nuclear facilities in North Korea continued to operate.

6 Plutonium is synthetically produced in a nuclear reactor by irradiating uranium with neutrons, and then extracting it from used nuclear fuel at a reprocessing facility. Plutonium is then used as a basic material for the production of nuclear weapons. Meanwhile, in order to use uranium for nuclear weapons, it is necessary to extract uranium 235 (U235), a highly fissile material, from natural uranium. This process is called enrichment. Generally, a large-scale enrichment facility that combines thousands of centrifuges is used to boost the U235 concentration to nuclear weapon levels (over 90%).

7 North Korea announced in October 2003 that it had completed the reprocessing of 8,000 used fuel rods that contain plutonium, and in May 2005 that it had completed extraction of an additional 8,000 used fuel rods. The 2020 Defense White Paper of the ROK estimates that North Korea possesses around 50 kg of plutonium, retaining the assessment given in the 2018 Defense White Paper.

8 The “Worldwide Threat Assessment” of the U.S. Director of National Intelligence of January 2016 notes, “North Korea has followed through on its announcement by expanding the size of its enrichment facility and restarting the reactor that was previously used for plutonium production.” It is said that the reactor was restarted at the end of August 2013. It has been noted that if the reactor is restarted, North Korea would have the capability to produce enough plutonium (approximately 6 kg) to manufacture approximately one nuclear bomb in one year.

9 The 2020 Defense White Paper of the ROK assesses that North Korea possesses a substantial amount of highly enriched uranium (HEU). It has been noted that a uranium enrichment facility different from the one in Yongbyon exists in Kangson.

With regard to the development of nuclear weapons, North Korea has conducted nuclear tests on October 9, 2006, May 25, 2009, February 12, 2013, January 6, 2016, September 9, 2016, and September 3, 2017. It is highly likely that North Korea has made strides in its nuclear weapons program, collecting the necessary data through these nuclear tests.

It is believed that North Korea seeks to miniaturize nuclear weapons and develop them into warheads that can be mounted on ballistic missiles, as part of its nuclear weapons program. On September 3, 2017, it was announced that Chairman Kim Jong-un had visited North Korea’s Nuclear Weapons Institute and had seen a hydrogen bomb capable of being loaded into an ICBM,¹⁰ in addition to which, following North Korea’s sixth nuclear test that was forced through on the same day, North Korea announced that it “successfully carried out a test of H-bomb for ICBM.”

In general, miniaturizing a nuclear weapon small enough to be mounted on a ballistic missile requires a considerably high degree of technological capacity. However, considering, for example, that the United States, the former Soviet Union, the United Kingdom, France, and China succeeded in acquiring such technology by as early as the 1960s, as well as the technological maturity that is estimated to have been reached through North Korea’s previous six nuclear tests, it is assessed that North Korea has already miniaturized nuclear weapons to fit ballistic missile warheads.¹¹

Furthermore, the yield of the sixth nuclear weapons test in 2017 was estimated to be the largest ever, with a maximum yield of approximately 160 kt. Given the size of the estimated yield, the possibility cannot be discounted that the test was of a hydrogen bomb.¹²

In any case, North Korea’s nuclear weapons development, considered in conjunction with North Korean efforts to enhance ballistic missile capabilities, including extending the range of ballistic missiles that are the delivery vehicles of WMDs, poses grave and imminent threats to Japan’s security, and significantly undermines peace and security of the region and international community. Therefore, it can never be tolerated.



Object claimed to be a hydrogen bomb capable of being loaded into an ICBM
[AFP/ Jiji]

b. Background of the Nuclear Program

North Korea’s ultimate goal regarding nuclear development is allegedly the maintenance of the existing regime.¹³ In addition, North Korea considers that it needs its own nuclear deterrence to counter the nuclear threat of the United States and is in no position at least in the short-term to overturn its inferiority in conventional forces vis-à-vis the United States and the ROK. Based on the claims by North Korea that nuclear weapons would never be traded away at negotiations, it is deemed that North Korea is promoting nuclear development as indispensable deterrent in maintaining the existing regime.

With regard to the issue of North Korea’s development of nuclear weapons, Chairman Kim expressed the desire on a number of occasions — including at the U.S.-North Korea summit meeting held on June 2018 — to work towards the complete denuclearization of the Korean Peninsula. However, he is presumed to have done so on the premise that North Korea would continue to possess a nuclear arsenal. In fact, North Korea has frequently asserted to the international community its claim to the status of “a nuclear weapon state.” At the December 2019 Plenary Meeting of the Central Committee of the KWP, Chairman Kim stated that if the United States persists in its hostile policy, there will never be denuclearization on the Korean Peninsula. In this way, North Korea has repeatedly insisted that it will not agree to unilateral denuclearization. In addition, it has been noted that even

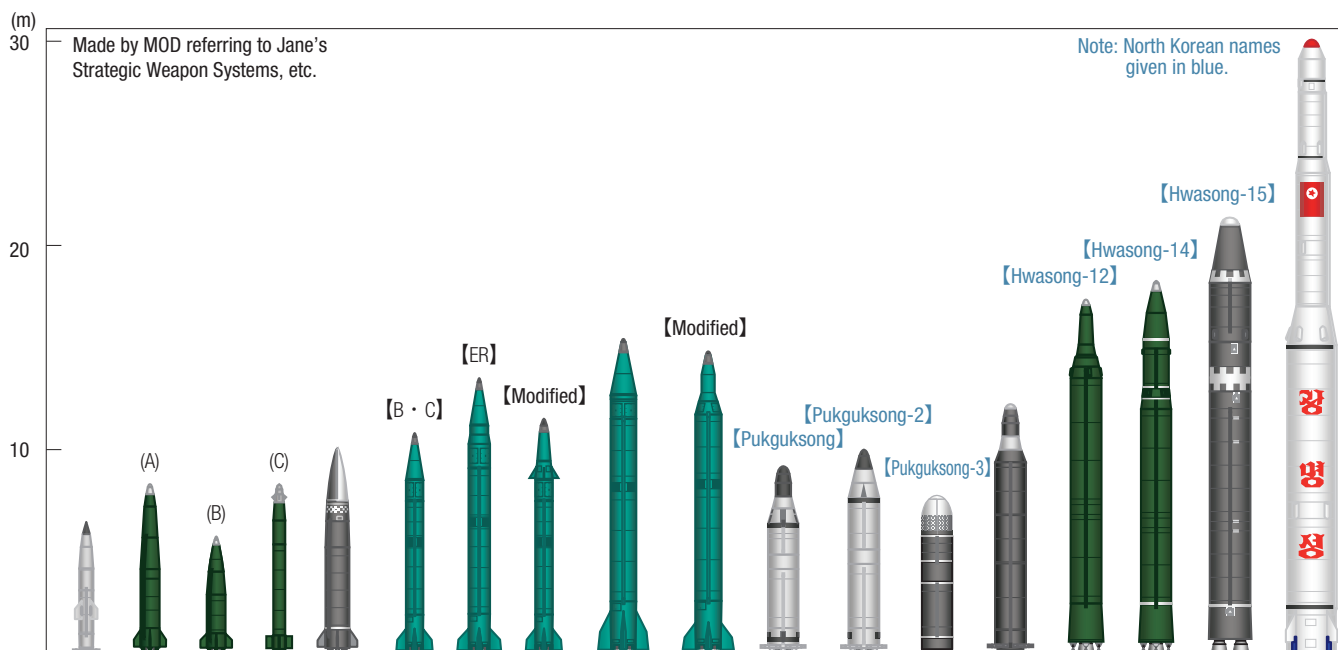
¹⁰ On September 3, 2017, in a report on a visit by Chairman Kim Jong-un to North Korea’s Nuclear Weapons Institute, the Korean Central News Agency (KCNA) announced that North Korea is able to conduct an “ultra-powerful electromagnetic pulse (EMP) attack over a wide area.”

¹¹ Over ten years have already passed since North Korea conducted its first nuclear test in October 2006. Furthermore, North Korea has conducted six nuclear tests to date. This timetable for technology development and the number of tests are reaching levels that are by no means inadequate, even when compared to the processes of developing technologies to miniaturize and lighten nuclear weapons in the United States, former Soviet Union, the United Kingdom, France, and China. The 2020 Defense White Paper of the ROK assesses that “North Korea’s ability to miniaturize nuclear weapons seems to have reached a considerable level.”

¹² The 2020 Defense White Paper of the ROK noted that the explosive yield of the sixth nuclear test was approximately 50 kt, significantly larger than the yield of the past tests and that this was assessed to be a hydrogen bomb test. North Korea also insisted that its fourth nuclear test, conducted in January 2016, was a hydrogen bomb test. However, given that the yield of that test is estimated at 6 to 7 kts, it is difficult to conceive that this was a hydrogen bomb test as generally defined.

¹³ According to “Military and Security Developments Involving the Democratic People’s Republic of Korea,” U.S. DoD (February 2016)

Fig. I-2-4-2 Ballistic Missiles Developed/Possessed by North Korea



	Toksa	New type SRBM (A)/(B)/(C)				New type Ballistic Missiles	Scud B, C, ER, Modified			Nodong Modified	SLBM	SLBM modified for ground launch	SLBM	Musudan	IRBM-class	ICBM-class	ICBM-class	Taepodong -2 variant
Range	Approx. 120 km	Approx. 600 km/ Approx. 400 km/ Approx. 400km*1				Approx. 450 km*1	Approx. 300 km/ Approx. 500 km/ Approx. 1,000km/ Under analysis			Approx. 1,300 km/ Approx. 1,500 km	1,000 km or more	1,000 km or more	Approx. 2,000 km	Approx. 2,500 -4,000 km	Approx. 5,000 km	5,500 km or more	10,000 km or more*2	10,000 km or more
Fuel / stage	Solid / 1	Solid / 1	Solid / 1	Solid / 1	Solid / 1	Liquid / 1			Liquid / 1	Solid / 2	Solid / 2	Solid / 2	Liquid / 1	Liquid / 1	Liquid / 2	Liquid / 2	Liquid / 2	Liquid / 3
Operation platform	TEL	TEL	TEL	TEL	TEL	TEL			TEL	Submarine	TEL	Submarine	TEL	TEL	TEL	TEL	TEL	Launch site

* 1 Ranges of new type SRBM (A)/(B)/(C) and new type Ballistic Missiles are the largest ones achieved.
 * 2 Depends on weight of the warhead, etc.

after announcing a commitment to full denuclearization of the Korean Peninsula, North Korea has continued nuclear development¹⁴ and that a uranium enrichment facility not disclosed by North Korea exists.

In light of the above, it is now necessary to keep a close watch on what kind of concrete actions it will take towards the dismantlement of all WMDs and all ballistic missiles of all ranges in a complete, verifiable and irreversible manner.

(2) Biological and Chemical Weapons

North Korea is an extremely closed regime. In addition, most materials, equipment, and technology used for manufacturing biological and chemical weapons are for both military and civilian uses, which in turn facilitates camouflage. For these reasons, details of the status of North Korea’s biological and chemical weapons

development and arsenals are unclear. However, with regard to chemical weapons, North Korea is suspected to have several facilities capable of producing chemical agents and already a substantial stockpile of such agents. North Korea is also thought to have some infrastructure for the production of biological weapons.¹⁵ Possession of sarin, VX, mustard and other chemical weapons, and of anthrax, smallpox, pest and other biological agents that could be used as biological weapons have been pointed out.

The possibility cannot be denied that North Korea is able to load biological and/or chemical weapons on warheads.

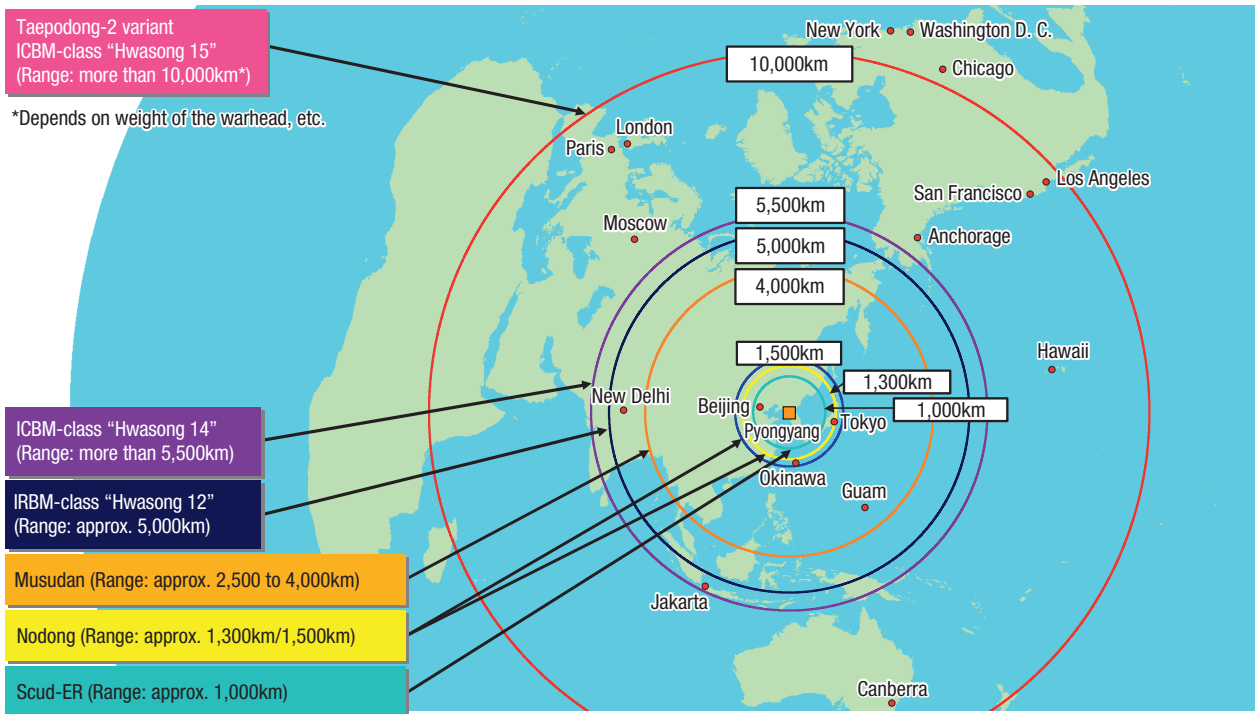
(3) Ballistic Missiles

As is the case with WMDs, many of the details of North Korea’s ballistic missiles are unknown, partly owing to North Korea’s extremely closed regime. It appears,

¹⁴ For example, “Worldwide Threat Assessment,” the U.S. Director of National Intelligence, released in January 2019

¹⁵ For example, the 2020 Defense White Paper of the ROK points out that, following the commencement of production in the 1980s, it is estimated that North Korea has a stock of 2,500-5,000 tons of various chemical weapons stored. It also notes that North Korea likely has the capability to produce a variety of biological weapons including anthrax, smallpox, and pests. Moreover, the U.S. DoD’s “Military and Security Developments Involving the Democratic People’s Republic of Korea” of May 2018 points out that, “North Korea probably could employ CW [chemical weapons] agents by modifying a variety of conventional munitions, including artillery and ballistic missiles.” North Korea ratified the Biological Weapons Convention in 1987 but has not acceded to the Chemical Weapons Convention.

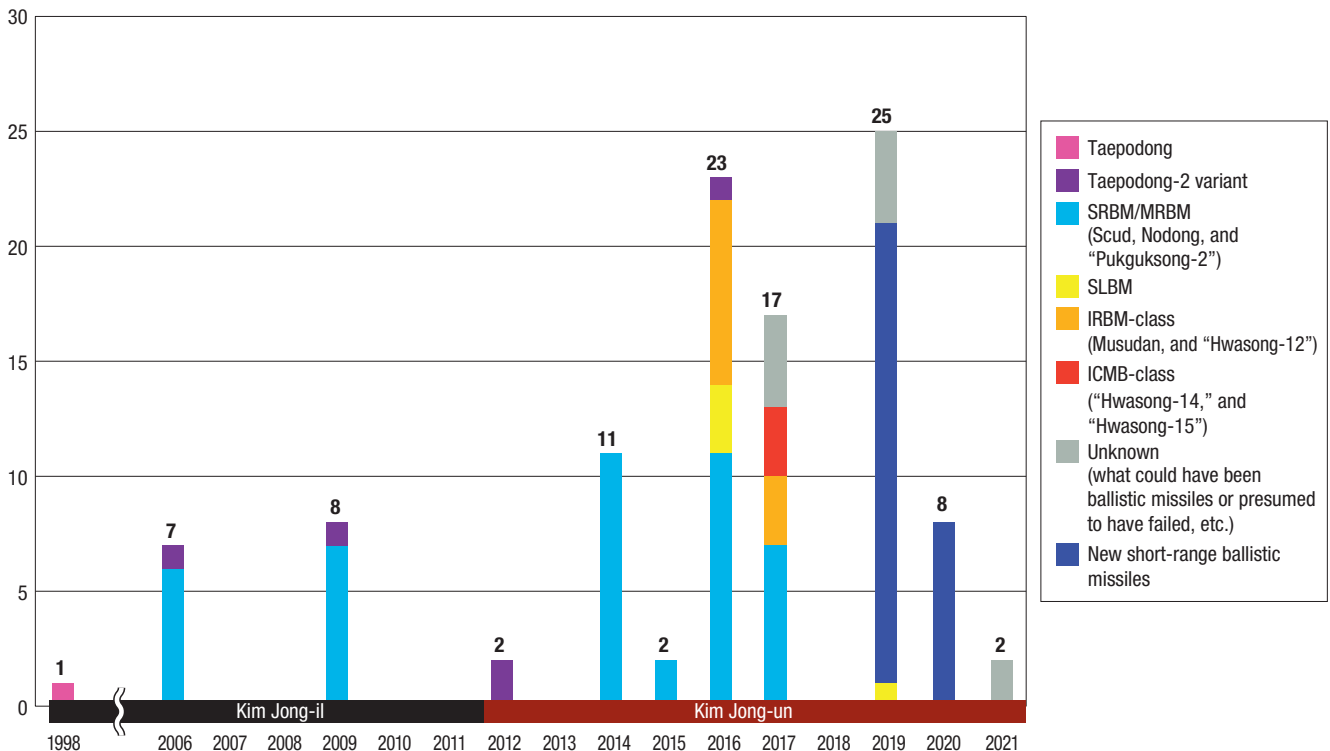
Fig. I-2-4-3 Range of North Korea's Ballistic Missiles



Note 1: The figure above shows a rough image of the distance each missile can reach from Pyongyang for the sake of convenience.
 Note 2: Quotation marks indicate the names used by North Korea.

Fig. I-2-4-4 Major Trends in North Korea's Ballistic Missile Launches

Number of Ballistic Missiles Launched by North Korea (as of March 2021)



- (i) **Increase of ranges:** Development of intercontinental-range ballistic missiles-class ballistic missiles (since 2017) with a range exceeding 10,000km
- (ii) **Enhancement of the accuracy and operational capabilities necessary for saturation attacks:** Repeated launches from unprecedented locations in the early morning and late hours of the night using TELs, often in multiple numbers (since 2014). Some ballistic missiles are said to be equipped with a Maneuverable Reentry Vehicle (MaRV) (since 2017).
- (iii) **Enhancement of secrecy and instantaneity and the ability to conduct surprise attacks:** Launches of SLBMs (since 2016) and promotion of the development of solid-fueled ballistic missiles (since 2016)
- (iv) **Irregular trajectories:** Launches of short-range ballistic missiles having a shape similar to that of the Russian "Iskander," which are said to be able to fly at a lower altitude than conventional ballistic missiles and on an irregular trajectory (since 2019)
- (v) **Diversification of the forms of launches:** Ballistic missile launches assumed to have used a lofted trajectory have been confirmed (since 2016).

Fig. I-2-4-5 Cases of North Korean Ballistic Missiles Overflying Japan

Launches of ballistic missiles allegedly as launches of satellites after reporting supposed falling areas to international organizations (three times)

Date	Presumed type of missile	Number of launches	Location	Flight distance
2009.04.05	Taepodong-2 or variant	1	Taepodong Area	3,000 km or more
2012.12.12	Taepodong-2 variant	1	Tongch'ang-ri Area	Approx. 2,600 km (second stage landfall)
2016.02.07	Taepodong-2 variant	1	Tongch'ang-ri	Approx. 2,500 km (second stage landfall)

Launches of ballistic missiles without prior notice (three times)

Date	Presumed type of missile	Number of launches	Location	Flight distance
1998.08.31	Taepodong-1	1	Taepodong Area	Approx. 1,600 km
2017.08.29	IRBM-class "Hwasong-12"	1	Near Sunan	Approx. 2,700 km
2017.09.15	IRBM-class "Hwasong-12"	1	Near Sunan	Approx. 3,700 km

* After the launch of Taepodong-1 on August 31, 1998, North Korea announced that it was the launch of a satellite.

* Quotation marks indicate the names used by North Korea.

Fig. I-2-4-6 Cases of North Korean Ballistic Missiles Launched on a Lofted Trajectory

Date	Presumed type of missile	Number of launches	Location	Flight distance	Altitude and flight duration
2016.06.22	Musudan	2	Wonsan	First: Approx. 100 km (maximum); Second: Approx. 400 km	Exceeded 1,000 km (the second one)
2017.05.14	IRBM-class "Hwasong-12"	1	Near Kusong	Approx. 800 km	Exceeded 2,000 km; for around 30 minutes
2017.07.04	ICBM-class "Hwasong-14"	1	Near Kusong	Approx. 900 km	Exceeded far beyond 2,500 km; for around 40 minutes
2017.07.28	ICBM-class "Hwasong-14"	1	Near Mupyong-ri	Approx. 1,000 km	Exceeded far beyond 3,500 km; for around 45 minutes
2017.11.29	ICBM-class "Hwasong-15"	1	Near Pyongsong	Approx. 1,000 km	Exceeded far beyond 4,000 km; for around 53 minutes
2019.10.02	SLBM "Pukguksong-3"	1	Near Wonsan	Approx. 450 km	Approx. 900 km; for around 17 minutes

* Quotation marks indicate the names used by North Korea.

however, that North Korea gives high priority to the development of ballistic missiles out of political and diplomatic considerations and from the viewpoint of earning foreign currency, in addition to enhancing its military capabilities. The ballistic missiles deemed to have been possessed and developed by North Korea are the following.¹⁶

 See Fig. I-2-4-2 (Ballistic Missiles Developed/Possessed by North Korea)

Fig. I-2-4-3 (Range of North Korea's Ballistic Missiles)

Fig. I-2-4-4 (Major Trends in North Korea's Ballistic Missile Launches)

Fig. I-2-4-5 (Cases of North Korean Ballistic Missiles Overflying Japan)

Fig. I-2-4-6 (Cases of North Korean Ballistic Missiles Launched on a Lofted Trajectory)

a. Types of Ballistic Missiles Possessed or Developed by North Korea

(a) Toksa

Toksa is a short-range ballistic missile with a range estimated to be approximately 120 km. It is transported and operated on a TEL.¹⁷ It is deemed that Toksa is the first ballistic missile possessed or developed by North Korea which adopts a solid fuel propellant.

(b) SRBM launched since 2019

Since 2019, North Korea has launched at least three types of short-range ballistic missile that are presumed to be new models. From images published by North Korea, it can be ascertained that these three types of SRBM were launched from a wheeled-drive or continuous-tracked

¹⁶ According to "Jane's Sentinel Security Assessment China and Northeast Asia" (accessed in March 2021) North Korea possesses 700 to 1,000 ballistic missiles in total, 45% of which are presumed to be Scud-class, 45% Nodong-class, and the remaining 10% other intermediate- and long-range ballistic missiles.

¹⁷ The signs of a launch from a fixed launcher are easy for the adversary to detect and are vulnerable to attack by the adversary. TEL was developed mainly by the former Soviet Union among others in order to make the detection of launch signs more difficult and increase survivability. According to the U.S. DoD's "Military and Security Developments Involving the Democratic People's Republic of Korea" of May 2018, North Korea possesses a maximum of 100 TELs for Scuds, 50 TELs for Nodongs, and 50 TELs for IRBMs (Musudans). As for a TEL-mounted missile launch, it is deemed difficult to detect individual specific signs in advance concerning the detailed location and timing of the launch. This is because it is operated by being mounted and transported on a TEL, and furthermore, military-related underground facilities are thought to exist all over North Korea. Along with activities related to the development of ballistic missiles, developments related to the building of TELs require close watch as they concern the operational capabilities of ballistic missiles by North Korea.

TEL, with the characteristic radial exhausts of solid fuel-propelled engines identifiable on each of the images. All of these missiles appeared in the military parades in October 2020 and January 2021.

(i) SRBM A

The SRBM (described by North Korea as “new type of tactical guided weapon”) launched in 2019 on May 4 and 9, July 25, and August 6 are all presumed to have the same system. Two missiles were launched on each of the aforementioned dates and flew approximately 200-600 km. In terms of the shape, the launched missiles have a similarity to that of the Russian short-range ballistic missile “Iskander.” It is also presumed that this missile is able to fly at a lower altitude than conventional ballistic missiles and on an irregular trajectory.

(ii) SRBM B

The SRBM (described by North Korea as “new weapon” or as “tactical guided weapon”) launched on August 10 and 16, 2019 and on March 21, 2020 are all presumed to have the same system and to be of a different type from the aforementioned A-type. Two missiles were launched on each of the aforementioned dates and flew approximately 250-400 km. It is also presumed that this missile is able to fly at a lower altitude than conventional ballistic missiles and on an irregular trajectory.

(iii) SRBM C

The SRBM (North Korea calls “super-large multiple rocket launcher”) launched in 2019 on August 24, September 10, October 31, and November 28, and on March 2, 9 and 29, 2020 are all presumed to be of a different type from the aforementioned A-and B-types. Two missiles were launched on each of the aforementioned dates and flew approximately 300-400 km. Some of the intervals between launches were estimated less than 1 minute, suggesting that North Korea is trying to improve the continuous fire capability required for saturation attacks and the like. Regarding TELs, various types can be

confirmed in images published by North Korea.

In addition, North Korea carried out two launches of what could have been SRBMs on July 31, 2019 and another two a couple of days later, on August 2.

Through such launches, North Korea appears to be pursuing enhancement of related technologies and operational capabilities, including enhancing secrecy and instantaneity, to make it difficult to detect signs of a launch, as well as improving its ability to conduct surprise attacks and its continuous fire capability. Considering the distances flown, it would appear that not only the ROK, but also parts of Japan would be within range of some of the SRBMs launched. There is also a concern that this short-range ballistic missile technology will be applied to longer-range missiles in due course.

(c) New type of ballistic missile launched in March

On March 25, 2021, North Korea launched two new-type ballistic missiles (called “new-type tactical guided missile” by North Korea) that had never been launched previously. This missile is presumed to have the same system as the one mounted on the five-axle TEL which appeared in the military parade in January 2021. The launched missiles flew approximately 450 km and at a lower altitude than Scud owned by North Korea.

In addition, from the images published by North Korea,



Image publicly released by North Korea when it launched short-range ballistic missiles (March 2020) [EPA/Jiji]

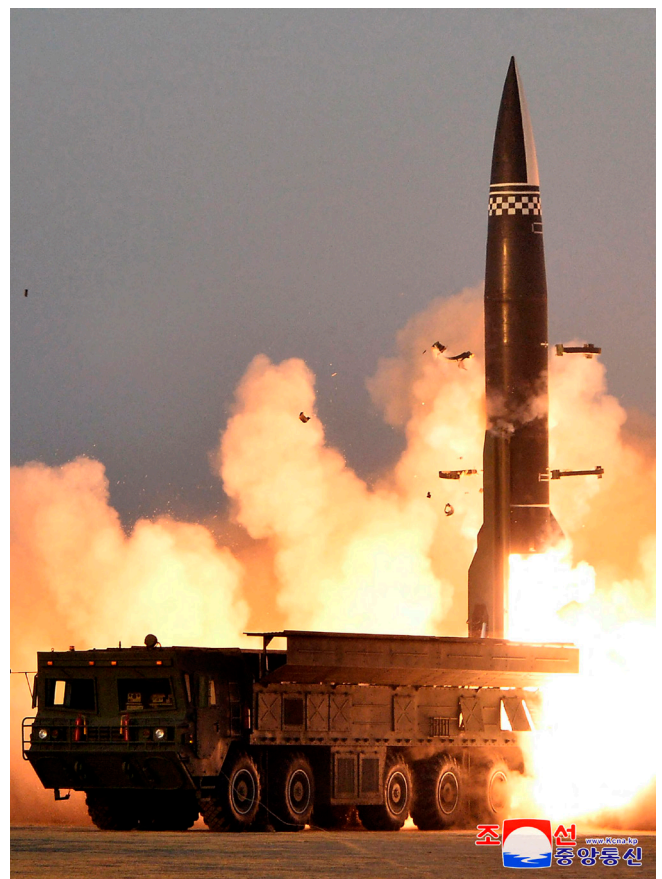


Image publicly released by North Korea when it launched ballistic missiles (March 2021) [AFP/Jiji]

it can be ascertained that it features solid fuel-propelled engines from the radial exhaust, which is characteristic of this type of engine.

(d) Scud

The Scud is a liquid fuel propellant single-stage ballistic missile and is transported and operated on a TEL.

Scud B and Scud C, a variant of Scud B with extended range, are SRBMs with ranges estimated to be about 300 km and 500 km, respectively. It is believed that North Korea has manufactured and deployed them, and has exported them to the Middle East and other countries.

The Scud ER (Extended Range) is a ballistic missile that has an extended range due to the extension of the Scud's body as well as the reduction in weight of the warhead, among other factors. The range of a Scud ER is estimated to reach approximately 1,000 km, and it appears that a part of Japan falls within this range.

In addition, North Korea is developing a ballistic missile that appears to be an improvement of the Scud missile. This ballistic missile was launched on May 29, 2017. A day after the launch, North Korea announced that it had successfully conducted a test launch of a newly developed ballistic rocket incorporating a precision navigation guidance system.

In addition, while the images released by North Korea show that the ballistic missile was launched from a continuous track TEL and had what appears to be small wings on its warhead, i.e., characteristics different from those of existing Scud missiles, the shape other than the warhead and length are similar to existing Scud missiles. Another similarity is that it can be confirmed that the missile has straight-line exhausts characteristic of a liquid fuel-propelled engine. It has also been noted that this ballistic missile is equipped with a MaRV.¹⁸

Given that North Korea announced that Chairman Kim Jong-un had ordered the development of ballistic missiles capable of precision attacks on enemy ships and other individual targets, the intent appears to be to enhance the accuracy of ballistic missile attacks.

(e) Nodong

The Nodong is a liquid fuel propelled single-stage ballistic missile and is transported and operated on a TEL. It is assessed to have a range of about 1,300 km, reaching almost all of Japan.

Although the details of Nodong's performance have not been confirmed, Nodong may not have the accuracy to carry out precise strikes on specific target installations, as this ballistic missile is likely based

on Scud technology. However, it has been suggested that North Korea is working to increase the Nodong's accuracy. In this regard, the launch of an improved type of ballistic missile (Nodong), aimed at enhancing accuracy by improving the shape of the warhead (whose range is deemed to reach approximately 1,500 km through the weight reduction of the warhead), was confirmed for the first time in the images published by North Korea a day after the launch of one Scud and two Nodong missiles on July 19, 2016.

(f) SLBM

(i) SLBM "Pukguksong"

It has been suggested that North Korea is developing an SLBM and a new submarine which is designed to carry the SLBM (referred to by North Korea as "Pukguksong"). Since it announced in May 2015 through its media that it conducted a successful test launch of an SLBM, it has made public SLBM "Pukguksong" launches on four occasions.¹⁹

Judging from the images and footage that it has made public so far, North Korea may have succeeded in operating the "cold launch system," in which the missile is ignited after it is ejected into the air. Moreover, in the launches in April and August 2016, it appears, based on observations such as the shape of the flame coming out of the missile and the color of the smoke, that the solid fuel-propelled system was adopted.

A ballistic missile presumed to be an SLBM "Pukguksong" has been confirmed in flight in the direction of Japan, launched from the vicinity of Sinpo, on the east coast of North Korea, on August 24, 2016. The SLBM flew approximately 500 km. Considering that this was its first SLBM to fly approximately 500 km, the possibility cannot be denied that North Korea had striven to solve the problems through the preceding launches and achieved certain technological progress.

Furthermore, it is predicted that the ballistic missile that was launched at this time flew on a somewhat higher than nominal trajectory, compared to the normal altitude of a ballistic missile with a firing range of 500 km. If it were launched on a nominal trajectory, the firing range is expected to surpass 1,000 km.

North Korea's "Pukguksong" SLBMs are believed to be launched from a Gorae-class submarine (displacement 1,500 tons). North Korea has one such submarine. It is also pointed out that North Korea seeks to develop a larger submarine to launch SLBMs.²⁰

18 For example, according to "Jane's Sentinel Security Assessment China and Northeast Asia" (accessed in March 2021), the launch on May 29, 2017, was presumed to have been the first launch of a short-range ballistic missile based on a Scud missile, equipped with a MaRV, suggesting that North Korea has made advances in its precision guidance systems.

19 On May 9, 2015, North Korea announced that it had succeeded in a test launch of an SLBM. On January 8, 2016, it released footage of an SLBM test launch that appears to be different from the one unveiled in May 2015. On April 24 and August 25, 2016, it again announced that it had succeeded in SLBM test launches. Moreover, the MOD predicts that North Korea also launched one ballistic missile presumed to be an SLBM on July 9, 2016, although North Korea has not made an announcement about the launches.

20 According to "Jane's Fighting Ships 2020-2021," etc.

(ii) SLBM “Pukguksong-3”

On October 2, 2019, North Korea launched what was presumed to be SLBM (described by North Korea as a “Pukguksong-3”) that differed from the SLBM “Pukguksong.” The missile in question flew for about 450 km and is presumed to have fallen into Japan’s exclusive economic zone (EEZ). As the ballistic missile launched on this occasion reached a maximum altitude of about 900 km, it is surmised to have been launched on a lofted trajectory. If launched on a nominal trajectory, it is estimated that it could have a range of approximately 2,000 km. The characteristic radial exhausts of solid fuel-propelled engines are identifiable on images published by North Korea. The ballistic missile in question could potentially have been launched from underwater launch test equipment.

It is deemed that through developing the SLBM and a new submarine to carry it, North Korea intends to diversify its ballistic missile attack capabilities and improve survivability. In addition, North Korea showcased two possible new types of submarine-launched ballistic missiles (SLBM) referred to as “Pukguksong-4” and “Pukguksong-5” in the military parades in October 2020 and January 2021 respectively.

(g) Ballistic Missile Modified from the SLBM

North Korea launched a ballistic missile on both February 12 and May 21, 2017, both of which appeared to be a modified version of the SLBM “Pukguksong” for ground launch (referred to by North Korea as “Pukguksong-2”). This ballistic missile is estimated to have flown approximately 500 km on both occasions, on somewhat higher trajectories than normal. If it were launched on a nominal trajectory, the firing range is assessed to surpass 1,000 km. A day after the launch on February 12, North Korea announced that it was developed as a ground-to-ground ballistic missile based on the results of the August 2016 SLBM launch. It also announced a day after the launch on May 21, 2017 that it had again successfully conducted the test launch of the Pukguksong-2 and that Chairman Kim Jong-un had authorized its “operational deployment.”

Moreover, the launch by a “cold launch system,” in which the missile is ignited after it is ejected into the air from a continuous track TEL, and the characteristic radial exhausts of solid fuel-propelled engines, can be confirmed from each of the images that North Korea released. It has the characteristics of appearing to be using “cold launch system” and solid fuel-propelled engines in common with the SLBM “Pukguksong.” Given that North Korea has made references to its

operational deployment, there is a possibility that North Korea will newly deploy a solid fuel-propelled engine that includes Japan within its firing range.

(h) Intermediate-Range Ballistic Missile (IRBM)-Class

To date North Korea has launched three liquid fuel-propelled IRBM-class ballistic missiles (referred to by North Korea as “Hwasong-12”). This ballistic missile was launched on May 14, 2017 and based on this flight pattern, it is presumed that the ballistic missile was launched on a lofted trajectory. Had it been launched on a nominal trajectory, the maximum firing range is assessed to be close to approximately 5,000 km. In addition, the straight-line exhausts characteristic of a liquid fuel propelled engine can be confirmed from the images released by North Korea a day after the launch, suggesting that the ballistic missile uses liquid fuel.

On August 29 and September 15, 2017, single missiles of this class were launched and flew over Japan’s territory in the vicinity of the Oshima Peninsula and Cape Erimo. These launches were the first cases of North Korea launching what it calls ballistic missiles that flew over Japan’s territory.

In view of their flight paths, these missiles appear to demonstrate a certain level of function as an IRBM. Also, the fact that missiles that overflowed Japan were launched in succession in a short time period would suggest that North Korea is steadily improving its ballistic missile capabilities.

Furthermore, although at the time of launches in May and August 2017 the missiles were confirmed to have been launched after being separated from the wheel-drive TEL, at the time of the September launch the missile was confirmed to have been launched while still attached to the wheel-drive TEL. Considering this point, together with North Korea’s claims at the time of the launch that it was for the purposes of “confirming practical operational procedures” and “realize the potential of the ‘Hwasong-12,’” there is a possibility that North Korea is improving its practical operational capabilities.

In 2016 North Korea conducted repeated launches of an IRBM-class ballistic missile that is presumed to be the Musudan,²¹ but although the missile launched in June flew for a certain distance on a lofted trajectory, the fact that there were two successive launch failures in October would suggest that there may still be obstacles remaining towards the operationalization of the Musudan and that North Korea may be concentrating on the development and operationalization of the “Hwasong-12” as an IRBM instead.

²¹ It has been suggested that, given its range of between 2,500 and 4,000 km, all parts of Japan and Guam may fall within the Musudan’s firing range. Similar to its Scud and Nodong counterparts, it is liquid fuel-propelled and is loaded onto a TEL to transport and operate. It has been noted that Musudan is a revamped version of the Russian SLBM SS-N-6 that North Korea acquired in the early 1990s.

(i) Intercontinental-Range Ballistic Missile (ICBM)-Class**(i) ICBM-class “Hwasong-14”**

North Korea has launched ICBM-class ballistic missile (referred to by North Korea as “Hwasong-14”) on July 4 and 28, 2017. From the flight pattern, it is presumed that the two ballistic missiles were launched on a lofted trajectory. If they were to have been launched on a normal trajectory, it is estimated that they would have a maximum range of at least 5,500 km.

On July 4, the day of the launch, North Korea made an “important announcement,” announcing that it had successfully conducted a test launch of a new type of ICBM. Furthermore, on the day following the July 28 launch, North Korea announced that the “nuclear bomb detonation device” had functioned normally, emphasizing that the safety of the warhead in an atmospheric reentry environment had been made maintained. This suggests that North Korea is aiming to operationalize long-range ballistic missiles.

Based on images released by North Korea, the “Hwasong-14”-type ICBM-class ballistic missiles have the following in common with the “Hwasong-12”-type IRBM-class ballistic missile: (1) the configuration of engine system (one main engine and four auxiliary engines); (2) the shape of the lower part of the propulsion system (conical shape); and (3) the straight-line flame of liquid-propulsion systems can be confirmed. Based on these facts and the respective ranges that can be estimated for the missiles, it can be assumed that the ICBM-class ballistic missile was possibly developed on the basis of the “Hwasong-12”-type IRBM-class ballistic missile.

Also based on images published by North Korea, it can be confirmed that the “Hwasong-14”-type ICBM-class ballistic missiles had been mounted on the wheeled eight-axle TEL similar to KN-08/14 (see (k) below). However, it can be confirmed from the images at the time of the launches that they were launched from simplified launch pads, not TELs. Furthermore, the images suggest that the missile was of two-stage construction.

(ii) ICBM-class “Hwasong-15”

On November 29, 2017, North Korea launched a single missile that is presumed to have been an intercontinental-range ballistic missile-class ballistic missile (referred to by North Korea as “Hwasong-15”). From the flight pattern it is presumed that the missile was launched on a lofted trajectory. On the day of the launch, North Korea made a “government statement,” declaring that it had successfully conducted a test launch of the “Hwasong-15,” a newly developed type of ICBM with the capability to strike all areas of the U.S. mainland, and asserting that it had now completed development of its



Image publicly released by North Korea when it launched an ICBM-class “Hwasong-15” (November 2017) [AFP/Jiji]

state nuclear force.

The following points would suggest that this missile is an ICBM-class ballistic missile, different from the “Hwasong-14”-type ballistic missile: (1) its flight distance and altitude; (2) North Korea’s announcement (the successful test launch of a new type of ICBM, the “Hwasong-15” was announced); (3) the fact that the missile was deployed on a previously unseen nine-axle wheel-drive TEL; and (4) shape of the warhead nose being more rounded than previous missiles. In addition, according to images released by North Korea, the missile was of a two-stage design, and it can be confirmed that it was removed from the TEL prior to launch and that its straight-line exhausts are characteristic of a liquid fuel propelled engine.

Furthermore, based on the flight altitude, distance flown and released images, it can be assumed that this missile could have a range in excess of 10,000 km, depending on the weight of the warhead deployed, etc., thus renewing concerns over the increasing ranges of North Korea’s ballistic missiles.

In addition, although the wheel-drive TELs possessed by North Korea are thought to be modified versions of Russian and Chinese TELs, it is noteworthy that North Korea has claimed to have developed its own TEL.

(j) Taepodong-2

Taepodong-2 are long-range ballistic missiles launched from fixed launch pads.²² Taepodong-2 is believed to use in its first stage, four engines, each of which is developed based on the technologies of Nodong, and the same type of engine in its second stage. Its range is estimated to be approximately 6,000 km for the two-stage type, while the range of its three-stage variant can be more than approximately 10,000 km assuming that the weight of the warhead is not over approximately 1 ton. Taepodong-2

²² There is also Taepodong-1, which may have been a transitory product for the development of Taepodong-2.

missiles and its variants have been launched a total of five times so far.

Most recently, in February 2016, North Korea conducted a launch of a missile disguised as a “satellite” from the Tongch’ang-ri district in the northwest coastline of North Korea using a Taepodong-2 variant after notifying international organizations. It is assessed that North Korea’s long-range ballistic missiles’ technological reliability had been advanced by this launch because it is estimated that (1) it successfully launched two similar types of ballistic missiles in a row; (2) the missile flew in almost the same way as the last launch; and (3) it put an object into orbit around the Earth.

Accordingly, it is believed that these test launches of long-range ballistic missiles can contribute to the development of shorter-range missiles in such ways as increasing the range and payload capability and improving the circular error probability (CEP). Also, related technology such as the separation technology of multi-stage propelling devices and the technology of posture control and thrust modulation of long-range ballistic missiles can be applied to other middle-range and long-range ballistic missiles that North Korea is newly developing. Therefore, the launch may lead not only to the improvement of other types of its ballistic missiles including Nodong but also to the advancement of North Korea’s entire ballistic missile program including the development of new ballistic missiles and diversification of attack measure.

(k) KN-08/KN-14

The details of the new missile “KN-08” which was showcased at the military parade in April 2012 and July 2013 are unknown. However, the missile is believed to be an ICBM. At the military parade in October 2015, a new missile thought to be the “KN-08” was showcased with a different-shaped warhead from the previous version. The new missile, considered a variant of the “KN-08,” is called the “KN-14.”

b. Major Trends in Ballistic Missile Launches

North Korea has repeatedly launched various types of ballistic missiles. In particular, since 2016 it has conducted more than 70 launches, including launches of what appear to be new types of missiles.

As for trends in North Korea’s ballistic missile launches, the following characteristics have been observed. Firstly, it appears that North Korea seeks to increase the firing range of ballistic missiles. An intercontinental-range ballistic missile-class ballistic missile launched in November 2017, which could have a range in excess of 10,000 km, depending on the weight of the warhead deployed, etc.

Although it is considered necessary for the operationalization of long-range ballistic missiles to

further verify technology for protecting the re-entry vehicle from the ultrahigh temperature that is generated during the atmospheric re-entry of the warhead part, North Korea, with announcements such as the one in November 2017 on the day of the launch of what is believed to have been an intercontinental-range ballistic missile-class ballistic missile, claiming that it had re-verified warhead reliability in a reentry environment, is displaying an intention to seek to secure and enhance technology aimed at the operationalization of long-range ballistic missiles.

North Korea announced twice in December 2019 that it had conducted a “crucial test” at its Sohae satellite launching station in Tongch’ang-ri district. It has been pointed out that these were ICBM-class ballistic missile engine tests. Furthermore, in the military parades in October 2020, a possible new type of ICBM-class ballistic missile appeared.

Should North Korea make further progress in the development of ballistic missiles, including the acquiring of reentry technologies, it may come to have a one-sided understanding that it has secured a strategic deterrence against the United States. However, if North Korea has such a false sense of confidence and recognition regarding its deterrence, it could lead to an increase and escalation of military provocations by North Korea in the region and could create situations that are deeply worrying also for Japan.

North Korea is presumed to have acquired the atmospheric re-entry technologies required for the operationalization of Nodong and Scud-ER ballistic missiles, within whose range Japan lies, suggesting that it already has the ability to attack Japan with nuclear weapons fitted to these ballistic missiles.

Secondly, North Korea may be aiming to enhance the accuracy, continuous fire capability, and operational capabilities necessary for saturation attacks and the like. As for the Scud and Nodong, which are already deployed,



A possible new ICBM-class ballistic missile that appeared at a military parade in October 2020 [EPA/Jiji]

since 2014, they have been launched from unprecedented locations, cutting across the Korean Peninsula, in the early morning and late hours of the night using TELs, often in multiple numbers. This indicates that North Korea is capable of launching Scuds and Nodongs from any place and at any time, from which it is deemed that it has increased confidence in the performance and reliability of its ballistic missiles.

As for Scuds and Nodongs, since the August 2016 Nodong launch, there have been launches where it is presumed that warheads fell in Japan's EEZ, posing a major threat to Japan's security. The four ballistic missiles, apparently Scud ERs, launched on March 6, 2017, were launched simultaneously.

It is possible that through these launches, North Korea's intentions are not only research and development of ballistic missiles but also the enhancement of their operational capabilities. Since Chairman Kim Jong-un has repeatedly instructed the military troops to reject formality and conduct practical training, it can be considered that these instructions underpin the launches of ballistic missiles that have already been deployed.

Some have noted that a ballistic missile which appears to have been modified from the Scud missile launched in May 2017 is equipped with a MaRV. Furthermore, images of the 2019 ballistic missile launches published by North Korea show that the missiles were launched from different places and hit the specific target.

This suggests that North Korea is aiming to enhance the accuracy of attack by upgrading ballistic missiles that have already been deployed and developing new ballistic missiles.

Furthermore, in the short-range ballistic missile launches on November 28, 2019 and March 2, 2020, the interval between launching the two missiles on both occasions was estimated at less than 1 minute, suggesting that North Korea is trying to improve the continuous fire capability required for saturation attacks and the like.

In recent years, North Korea also appears to have been striving to improve its practical operational capabilities, conducting target practice using a combination of SRBMs and various types of artillery.

Thirdly, North Korea appears to be seeking to improve its ability to conduct surprise attacks by enhancing secrecy and instantaneity to make it difficult to detect signs of a launch.

Using a TEL or submarine, a ballistic missile can be launched from any point, making it difficult to detect signs of a launch in advance. North Korea has repeatedly launched ballistic missiles from TELs and SLBMs.

In addition, all the ballistic missiles launched since 2019 appear to use solid fuel. It is therefore believed that North Korea is proceeding with the development

of solid-fueled ballistic missiles. Generally solid fuel-propelled ballistic missiles are preloaded with solid fuel, and therefore, they can be launched instantly and the signs of their launch are more difficult to detect. Furthermore, they can be reloaded more quickly, and they are relatively easier to store and handle in comparison to liquid fuel-propelled missiles. In this respect, they are considered to be superior militarily. From these factors, North Korea is deemed to be aiming to enhance its surprise attack capabilities.

Fourthly, North Korea is deemed to have been developing ballistic missiles that fly at low altitudes on irregular trajectories, in an attempt to breach other countries' missile defense networks. The SRBMs A and B fly at a lower altitude than conventional ballistic missiles, and they seem to be able to fly on an irregular trajectory. The prevailing view is that these types of missiles are designed to breach missile defense networks.

Fifthly, North Korea may be attempting to diversify the forms of launches. It has been confirmed that the June 22, 2016, May 14, July 4, July 28, and November 29, 2017, and October 2, 2019 ballistic missile launches used a lofted trajectory, in which missiles are launched to high altitudes at higher angles than normal. Generally, when a launch is made on a lofted trajectory, interception is considered to be more difficult.

North Korea is proceeding with ballistic missile development at an extremely rapid pace and is believed already to have the ability to attack Japan with nuclear weapons fitted to Nodong and Scud-ER ballistic missiles, within whose range our nation lies.

Furthermore, North Korea has developed more advanced missile-related technologies in recent years, developing the SRBMs that use solid fuel and fly at lower altitudes than conventional ballistic missiles and on irregular trajectories. North Korea is therefore believed to be trying to breach missile defense networks by making it more difficult to detect signs of a launch and conduct early detection and interception. There are concerns that such advanced technologies will be applied to longer-range missiles.

Thus, North Korea is relentlessly pursuing increasingly complex and diverse modes of attack and is steadily strengthening and improving its attack capabilities. These enhancements in its capabilities make early detection of the signs of a launch and the interception of the missiles more difficult, thereby posing new challenges for the information gathering, early warning, and interception postures of relevant countries, including Japan. It is necessary that we continue to carefully monitor moves by North Korea regarding its ballistic missile development.

(4) Future Trends in Weapons Development

At the 8th Congress of the KWP in January 2021, North Korea stated that it would increase “nuclear war deterrent” and develop “the most powerful military strength.” North Korea also specifically mentioned the development of various weapons as its future goals and showed a stance of enhancing its military power.

With regard to nuclear and missile capabilities, North Korea expressed its intention to develop “tactical nuclear weapons” and continuously advance the production of “super-sized nuclear warheads.” North Korea also mentioned the promotion of research and development of multi-warhead technology, “hypersonic gliding flight warheads,” nuclear-powered submarines, and solid fuel-propelled ICBM, demonstrating its stance of relentlessly pursuing increasingly complex and diverse modes of attack.

Besides the nuclear and missile capabilities, development of reconnaissance means, including military reconnaissance satellites and unmanned aerial vehicles, was also mentioned.

These goals demonstrate North Korea’s stance of following the trends of major countries based on military science and technological trends, and displays the improvements of its military capabilities both domestically and overseas. In addition, for example, North Korea has mentioned its plan to implement the development and introduction of “hypersonic gliding flight warheads” and the operation of military reconnaissance satellites “in the near future.” This suggests that North Korea will focus more on the realization of the goals described above, in the same way as its ballistic missile development.

Furthermore, in the military parades in October 2020 and January 2021, a possible new type of ICBM-class ballistic missile, two possible new types of submarine-launched ballistic missiles (SLBM) referred to as “Pukguk-song-4” and “Pukguk-song-5,” and a new type of ballistic missile (launched in March 2021) appeared. Of these missiles, there is a view regarding the possible new type of ICBM-class ballistic missile that its power could be enhanced by increasing the weight of the warhead and it could be improved to become a multi-warhead missile, which is generally considered more difficult to intercept than a single-warhead.

In light of the situation above, it will continue to require paying close attention with great interest to the trend of North Korea’s weapon development.

4 Domestic Affairs

(1) Developments Related to the Kim Jong-un Regime

In North Korea, the power base centered on Chairman Kim is being solidified. The constitution was amended in April and August 2019, strengthening Chairman Kim’s authority through such provisions as the stipulation that the Chairman of the State Affairs Commission is “the supreme leader of the Democratic People’s Republic of Korea who represents the state.” It is pointed out that North Korea is run under the leadership of the party. In January 2021, the 8th Congress of the KWP was held and Chairman Kim was appointed general secretary of the Workers’ Party.

On the other hand, with senior officials unable to dispute the decisions of Chairman Kim Jong-un due to an atrophy effect created by the frequent executions, demotions, and dismissals of senior officials, it is believed that there is growing uncertainty, including over the possibility of North Korea turning to military provocations without making adequate diplomatic considerations. In addition, it has been suggested that there is declining social control caused by widening wealth disparities and information inflow from other countries. In this regard, attention will be paid to the stability of the regime.

(2) Economic Conditions

In the economic domain, North Korea has been facing chronic stagnation and energy and food shortages due to the vulnerability of its socialist planned economy and diminishing economic cooperation with the former Soviet Union and East European countries following the end of the Cold War.²³

Furthermore, the strengthening of sanctions by countries including Japan and the United States, and the sanctions of the related UN Security Council resolutions in response to the implementation of nuclear tests and missile launches can be assumed to have had a certain effect, when considered together with the severe economic situation of North Korea. Accordingly, if China, North Korea’s largest trading partner, and other relevant countries continue to rigorously implement sanctions, an even more severe economic situation could beset North Korea.

In 2020, COVID-19 infection and natural disasters, in addition to sanctions, seemed to have had a significant impact on North Korea’s economy. At the 8th Congress of the KWP in January 2021, Chairman Kim remarked that, due to “unexpected challenges,” “the objectives for

²³ In recent years, North Korean fishing boats and Chinese fishing boats have been conducting illegal operations within Japan’s exclusive economic zone (EEZ) surrounding Yamato tai, creating a situation that threatens the safety of Japanese fishing boats operating in the EEZ. In this sea area, the Fisheries Agency and the Japan Coast Guard in cooperation crack down on illegal operations by foreign fishing boats. See the Cabinet Office Annual Report, “The situation of the oceans and the implemented measures by the Government with regard to the oceans,” the White paper on Fisheries and the Japan Coast Guard Report for further details of the control activities.

North Korea's Ballistic Missile Capabilities

North Korea already possesses hundreds of ballistic missiles, such as the Nodong and Scud ER, which has a range including Japan. It is believed that it already has the ability to attack Japan with nuclear weapons fitted to these ballistic missiles. Such military trends pose grave and imminent threats to Japan's security and significantly undermine the peace and security of the region and the international community.

In addition to its traditional ballistic missile capabilities, North Korea has also been improving its ballistic missile technologies and operational capabilities at an extremely rapid pace over the past few years.

The three new types of short-range ballistic missiles North Korea has repeatedly launched since May 2019 are believed to have introduced technologies including the use of solid fuel, low altitude flight, and irregular trajectories that make it more difficult to detect signs of launch and conduct early detection and interception. These new missiles, given their range, are believed to be aimed mainly at the ROK. However, it is quite possible that such technology could be applied to longer-range missiles. North Korea has furthermore claimed that the ballistic missile it launched in March 2021 had the irregular trajectory features.

Additionally, in October 2019, North Korea launched its new "Pukguksong-3" submarine-launched ballistic missile (SLBM). The development of SLBMs could make it more difficult to detect signs of a launch, improving its surprise attack capabilities. Although there have been no SLBM launches since, possible new types of SLBM referred to as "Pukguksong-4" and "Pukguksong-5" appeared in military parades in October 2020 and January 2021. It is also pointed out that North Korea is developing a new type of submarine that is believed to be capable of carrying SLBMs. North Korea is believed to be

continuing development in this area.

In these ways, in addition to its conventional Nodong and Scud ERs, North Korea has also been developing ballistic missiles that are more difficult to intercept. Furthermore, at the 8th Korean Workers' Party Congress in January 2021, Chairman Kim Jong-un made comments regarding the promotion of development and research of technologies that could make interception even more difficult, including multi-warhead technology, "hypersonic gliding flight warheads," nuclear-powered submarines, and solid fuel-propelled ICBMs. If these efforts to improve ballistic missiles capabilities continue, there are concerns that they could destabilize the regional security.

Japan never tolerates the possession of nuclear weapons by North Korea. It is important that the international community as a whole continues to promote the full implementation of the UN Security Council resolutions in order to achieve the complete, verifiable, and irreversible dismantlement of all North Korea's weapons of mass destruction and ballistic missiles of all ranges.



A possible new SLBM that appeared at a military parade in January 2021
[EPA/Jiji]

the growth of the national economy fell a long way short of implementation and consequently the people's living standards could not be improved remarkably."

At the 8th Congress of the KWP, Chairman Kim stated that "above all, we should launch a do-or-die struggle to implement without fail the new five-year plan for the national economic development." It therefore appears that North Korea regards the rebuilding of the economy as being of paramount importance. Nevertheless, as North Korea is unlikely to carry out any structural reforms that could lead to the destabilization of its current ruling

system, it faces various challenges in making fundamental improvements to its current economic situation.

North Korea is presumed to be evading the UN Security Council sanctions by conducting ship-to-ship transfers prohibited by the UN Security Council resolutions.²⁴ The final report of the UN Security Council's Panel of Experts assisting the North Korea Sanctions Committee ("Final Report of the Panel of Experts submitted pursuant to resolution 2515 (2020)") released, in April 2021, points out that, during the January-September period in 2020, North Korea illicitly

²⁴ Between the beginning of 2018 and the end of March 2021, MSDF patrol aircraft and ships have observed 24 cases in which a North Korean-flagged tanker and a foreign-flagged vessel were anchored side-by-side on the high seas. As a result of comprehensive judgment by the government, there are strong suspicions that the observed vessels were engaging in illicit ship-to-ship transfers. For details of these cases and information about Japan's response, see Part III, Chapter 1, Section 1.

imported a volume of petroleum products that exceeded the annual aggregate 500,000-barrel cap several times mainly by ship-to-ship transfers.

 Fig. I-2-4-7 (Sanctions based on UN Security Council Resolutions against North Korea)

5 Relations with Other Countries

(1) Relations with the United States

In June 2018, the historic first-ever U.S.-North Korea summit meeting was held and both sides confirmed that they would join their efforts to build a lasting and stable peace regime on the Korean Peninsula. Chairman Kim Jong-un made clear his intention to work towards the complete denuclearization of the Korean Peninsula, and confirmed that negotiations would continue with the United States.

However, the second U.S.-North Korea summit meeting in February 2019 ended without any agreement being reached between the two countries.

At the December 2019 Plenary Meeting of the Central Committee of the KWP, Chairman Kim stated that, since the United States was holding U.S.-ROK joint military exercises, there were no grounds for North Korea to be unilaterally bound any longer by a commitment that no other party honors. He also announced that there will never be denuclearization on the Korean Peninsula, and that North Korea will continue developing strategic weapons until the United States rolls back its hostile policy towards North Korea. Furthermore, Chairman Kim remarked that North Korea would maintain its nuclear deterrence against the United States' nuclear threat and that the scope and depth of the buildup of the deterrent would be coordinated depending on the future approach of the United States.

Chairman Kim, at the 8th Congress of the KWP in January 2021, described the United States as its “principal enemy,” and said that the policy toward North Korea of the United States would not change regardless of who would be in power. On the other hand, Chairman Kim also remarked that the key to establishing a new U.S.-North Korea relationship would be the withdrawal of the hostile policy by the United States.

While the Biden administration of the United States, inaugurated in January 2021, intends to work to reduce the threats posed by North Korea's growing nuclear and missile programs standing shoulder-to-shoulder with the ROK and Japan, attention will be paid to the future trends of the situation.

However, no concrete progress has yet been observed in the North Korea's dismantlement of WMDs and missiles.

(2) Relations with the ROK

In 2018, substantial progress was realized in inter-Korean relations. The inter-Korean summit meeting was held in April, resulting in the issuance of the Panmunjom Declaration, which confirmed among other matters that the two parties agreed to completely cease all hostile acts against each other in every domain, and confirmed the common goal of realizing a nuclear-free Korean Peninsula. In addition, in another inter-Korean summit meeting held in May, Chairman Kim Jong-un reiterated his desire for the complete denuclearization of the Korean Peninsula. Furthermore, at the inter-Korean summit meeting in September, Pyongyang Joint Declaration of September 2018, which referred to an ending of military hostilities, was issued. In addition, the “Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain,” which prescribed concrete measures to ease inter-Korean military tensions, was signed.

However, 2019 saw no major advances in inter-Korean dialogue and cooperation programs, while in 2020 there was a temporary increase in tension seen in the inter-Korean relationship. In June 2020, First Vice Department Director of the Central Committee of the KWP Kim Yo-jong released a statement in reacting against a North Korean defectors group that had distributed flyers blaming Chairman Kim Jong-un. Since then, North Korea has shown some moves such as the explosion of the Inter-Korean Joint Liaison Office in Kaesong, announcement of a review of military action plan, which contains the strengthening of military posture along the DMZ and resumption of military training and exercises (it was later announced that this was suspended).

Meanwhile, in regard to the case of the shooting of a government official of the ROK which occurred at sea near the inter-Korean border in September 2020, Chairman Kim Jong-un expressed an apology. In his speech at the military parade in October of the same year, Chairman Kim remarked that he would hope for the day to come when the North and South take each other's hands facing each other again. In the 8th Congress of the KWP in January 2021, Chairman Kim mentioned that it would be no exaggeration to say that the inter-Korean relationships have been brought back to the time before the publication of the Panmunjom Declaration, which was signed at the inter-Korean summit in April 2018. On the other hand, Chairman Kim also said that, depending on the attitude of the ROK side, the inter-Korean relationship could return to the new starting point for peace and prosperity. In March 2021, regarding the U.S.-ROK combined command post training, Vice Department Director of the Central Committee of KWP Kim Yo-jong released a statement blaming the exercises

Fig. I-2-4-7

Sanctions based on UN Security Council Resolutions against North Korea

Main content		
Items	Sanction content	Related resolution
Crude oil	Restriction of annual supply to 4 million barrels or 525,000 tons	No. 2397 (December 2017)
Petroleum refined products	Restriction of annual supply to 500,000 barrels	No. 2397 (December 2017)
Coal	Total ban on imports from North Korea	No. 2371 (August 2017)
Ship offloading (ship-to-ship transfer)	Banned	No. 2375 (September 2017)

Summary of recent UN Security Council resolutions on sanctions against North Korea

Date	Resolution	Catalyst event	Main content
2006.7.16	No. 1695	Seven ballistic missile launches (2006/7/5)	Request transfer prohibition on related goods and funds for nuclear and missile plans
2006.10.15	No. 1718	First nuclear test (2006/10/9)	Prohibition on export and import of weapons of mass destruction related goods and large weapons
2009.6.13	No. 1874	Taepodong-2 launch (2009/4/5), second nuclear test (2009/5/25)	Adoption of financial regulations
2013.1.23	No. 2087	Taepodong-2 launch (2012/12/12)	Addition of six organizations and four individuals to sanctions
2013.3.8	No. 2094	Third nuclear test (2013/2/12)	Tougher financial regulations and obligation to conduct inspections of goods on ships suspected of transporting banned goods within one's own territorial waters
2016.3.3	No. 2270	Fourth nuclear test (2016/1/6), Taepodong-2 launch (2016/2/7)	Ban on air fuel exports and supply and ban on coal and iron ore exports by North Korea (excluding those for personal livelihood or unrelated to North Korea's nuclear and missile plans)
2016.11.30	No. 2321	Fifth nuclear test (2016/9/9)	Establishment of an upper limit on coal exports by North Korea (roughly \$400 million/7.5 million tons a year)
2017.6.3	No. 2356	Ballistic missile launches since 2016/9/9	Addition of four organizations and 14 individuals to sanctions
2017.8.6	No. 2371	ICBM-class "Hwasong-14" launch (2017/7/4 and 7/28)	Total ban on coal imports, total ban on iron and iron ore imports, and establishment of an upper limit on the total number of work permits for North Korean workers for the first time
2017.9.12	No. 2375	Sixth nuclear test (2017/9/3)	Addition of oil to supply restrictions for the first time, addition of textile products to the import ban, and ban on work permits for overseas workers
2017.12.23	No. 2397	ICBM-class "Hwasong-15" launch (2017/11/29)	Further supply restrictions in the oil area, expansion of the scope of bans on trade (exports/imports) with North Korea bans, and return of North Korean workers to North Korea

* Quotation marks indicate the names used by North Korea.

and mentioned the possibility of breaching the Inter-Korean Military Agreement.

In this way, North Korea has been utilizing a carrot and stick approach to the ROK, and attention will be paid to future trends of inter-Korean relations.

(3) Relations with Other Countries

(i) Relations with China

China is a vital political and economic partner for North Korea and maintains a degree of influence on North Korea. The China-North Korea Treaty on Friendship, Cooperation and Mutual Assistance, which was concluded in 1961, is still in force. In addition, China is currently North Korea's biggest trade partner. In 2019, trade volume between China and North Korea was very large, accounting for over 90% of North Korea's total trade (excluding trade between North Korea and the

ROK),²⁵ suggesting North Korea's dependence on China.

With regard to the situation in North Korea and its nuclear issue, China has expressed support for denuclearization on the Korean Peninsula, for peace and stability on the Korean Peninsula, and solving problems through dialogue and consultations. While it has endorsed the series of UN Security Council Resolutions, which strengthen sanctions on North Korea. It has also stated that sanctions alone will be unable to achieve a fundamental solution to the nuclear issue and that a solution should be found through dialogue and consultations. In this respect, China has expressed support for the U.S.-North Korea dialogue, including U.S.-North Korea summit meetings. China, as well as North Korea and Russia, insists that denuclearization of the Korean Peninsula should be gradual and simultaneous, with relevant countries taking corresponding measures.

²⁵ According to an announcement by the Korea Trade-Investment Promotion Agency (KOTRA)

Since March 2018, the China-North Korea summit meeting has been held five times. At the 8th Congress of the KWP in January 2021, Chairman Kim mentioned that those summit meetings had deepened “strategic communication” and “mutual understanding” between the two countries.

(ii) Relations with Russia

Concerning North Korea’s nuclear issue, Russia, along with China, has expressed support for the denuclearization on the Korean Peninsula and early resumption of the Six-Party Talks. Although Russia endorsed UN Security Council Resolution 2397, adopted in December 2017, it emphasized that pressure on North Korea should make

way for dialogue and negotiations.

At the 8th Congress of the KWP in January 2021, Chairman Kim referred to laying “a cornerstone for the expansion of friendly relations with Russia” as the outcome since the 7th Congress of the KWP.

(iii) Relations with Other Countries

It has been reported that North Korea has cooperative relationships with countries such as Iran, Syria, Pakistan, Myanmar, and Cuba in military affairs including arms trade and military technology transfer.

 See Chapter 3, Section 6-4 (Growing Concerns about Transfer and Proliferation of WMDs and Other Technologies), p. 196

2 The ROK and the U.S. Forces Korea

1 General Situation

With regard to its North Korea policy, the Moon Jae-in administration is placing emphasis on improving the inter-Korean relationship and easing tensions. How the North Korea policy of the Moon administration will impact inter-Korean relations will continue to require close attention.

The U.S. Forces, mainly the Army, have been stationed in the ROK since the ceasefire of the Korean War. The ROK has established very close security arrangements with the United States primarily based on the U.S.-ROK Mutual Defense Treaty. The U.S. Forces Korea have been playing an important role in securing peace and stability of the region such as playing a vital role in deterring the outbreak of largescale armed conflict on the Korean Peninsula.

2 Defense Policies and Defense Reform of the ROK

The ROK has a defensive weakness, namely, its capital Seoul, which has a population of approximately 10 million, is situated close to the DMZ. The ROK has set the National Defense Objective as follows: “to protect the country from external military threats and invasions, to support peaceful unification, and to contribute to regional stability and world peace.”

As one of the “external military threats,” the ROK, in its Defense White Paper, used to designate North Korea as the “main enemy” or state that “the North Korean regime and its armed forces...will remain as our enemies.” In the ROK Defense White Paper 2018, published in January 2019, while continuing to describe North Korea’s WMDs as a threat to the peace and stability of the Korean Peninsula, the designation of the country

as an enemy was eliminated. Instead, the white paper states as follows: “The Republic of Korea’s armed forces regard any forces that threaten and encroach upon our sovereignty, territory, people and assets as our enemies.” In addition, the white paper emphasizes the importance of omni-directional response to security threats. The 2020 Defense White Paper of the ROK, published in February 2021 did not contain any expressions describing North Korea as an enemy.

The ROK has continued to undertake reforms of its national defense. In recent years, in July 2018, the ROK released the “Defense Reform 2.0,” which has set the following three main goals: making omni-directional response to security threats, enhancing military power based on advanced science and technology and developing armed forces appropriate for a developed country. This plan calls for continued promotion of efforts to secure combat capabilities necessary for responding to the threat from North Korea and also includes the reduction of the troops and the mandatory military service period.

3 Military Posture of the ROK

The ROK’s military capacity is as follows. The ground forces consist of 19 army divisions with approximately 460,000 personnel and 2 marine divisions with approximately 29,000 personnel; the naval forces consist of 230 vessels with a total displacement of approximately 260,000 tons; and the air forces (Air Force and Navy combined) consist of approximately 640 combat aircraft.

The ROK has been modernizing its military forces — not only its Army but also its Navy and Air Force — in order to establish an omni-directional defense posture to deal with future potential threats, not least threats from North Korea. The Navy has been introducing submarines, light aircraft carriers, large transport ships,

and domestically built destroyers. The Air Force is currently promoting a program for the installation of the F-35A as a next-generation fighter with stealth property.

In November 2017, the ROK Government announced a revision of its missile guidelines, which were agreed by the U.S. and ROK governments in 1979 and stipulate the range of ballistic missiles it possesses; the revision included the elimination of warhead weight limits on ballistic missiles, in order to enhance deterrence against military provocation by North Korea. Furthermore, to address North Korean nuclear and missile threats, as well as expanding the missile capabilities of the ROK Forces, the ROK is engaging in efforts to build a “strategic strike system,” which would use missiles and other means to launch rapid preemptive strikes directly targeting the North Korean command, and also a missile defense system called Korea Air and Missile Defense (KAMD). In addition, the focus of defense has changed from responding to the threat of North Korean missiles to an omnidirectional response to security threats.

In terms of ballistic missiles, the ROK appears to have operationally deployed Hyunmoo-2 missiles with an estimated range of 300-800 km and is believed to have made a successful test launch of Hyunmoo-4 with a two-ton warhead weight and 800 km firing range in 2020, following the abolition of warhead weight limits in the 2017 revision of the missile guidelines.

With regard to cruise missiles, the ROK appears to have operationally deployed the Hyunmoo-3 surface-to-surface cruise missile, which is believed to have a range of about 500-1,500 km, and Haeseong series ship-to-ship/ ship-to-surface cruise missiles, which are believed to have a maximum range of 1,000-1,500 km. The Dosan Ahn Changho submarine and the arsenal ship expected to be introduced under the 2020-2024 mid-term defense plan will reportedly be equipped with ballistic missiles in the future.

Furthermore, at the U.S.-ROK summit meeting held in May 2021, the conclusion of the ROK’s missile guidelines was announced.

In recent years, the ROK has actively promoted equipment export, which reached approximately US\$3.2 billion on a contract value basis in 2017. Since 2006, the amount has increased by nearly 13-fold in 11 years. It is reported that export items have diversified to include communication electronics, aircraft, and naval vessels.

Defense spending in FY2021 (regular budget) increased by about 5.4% from the previous fiscal year to nearly KRW 52.8401 trillion, marking the 22nd consecutive year of increases since 2000. According

to the Defense Reform 2.0, the ROK will increase the defense budget 7.5% on an annual average.

 See Fig. I-2-4-8 (Changes in the ROK’s Defense Budget)

4 U.S.-ROK Alliance and U.S. Forces Korea

The United States and the ROK have taken various steps to deepen the U.S.-ROK Alliance in recent years.

The two countries regularly confirm the strengthening of the U.S.-ROK Alliance at the summit level. For example, as specific undertakings, the two countries signed the U.S.-ROK Counter-Provocation Plan for dealing with North Korea’s provocations in March 2013, and approved the Tailored Deterrence Strategy, designed to enhance deterrence against North Korean nuclear and other WMD threats, at the 45th Security Consultative Meeting (SCM) in October of the same year.

At the 46th SCM in October 2014, the two countries agreed on “Concepts and Principles of ROK-U.S. Alliance Comprehensive Counter-missile Operations (4D Operational Concept)” to tackle North Korean ballistic missile threats. At the 47th SCM in November 2015, the implementation guidance on the 4D Operational Concept was approved.

Additionally, after North Korea went ahead with its nuclear test in January 2016, the Terminal High Altitude Area Defense (THAAD)²⁶ was temporarily deployed by the U.S. Forces Korea in September 2017. In addition, in a U.S.-ROK summit meeting also held in September, the enhanced deployment of U.S. strategic assets in and around the ROK on a rotational basis was agreed.

In light of progress in dialogue with North Korea, the U.S. and the ROK have made several announcements regarding the “conclusion” of U.S.-ROK joint military exercises, including Freedom Guardian, Vigilante Ace, and the Key Resolve and Foal Eagle exercises since 2018. Furthermore, in March 2019, the two countries conducted Alliance (Dong Maeng), a combined command exercise, and also carried out another combined command exercise in August 2019 without clearly disclosing its size, exercise name, and other details. That November, the United States and the ROK announced the postponement of a U.S.-ROK combined air training, as an act of goodwill to contribute to an environment conducive to diplomacy and the advancement of peace. In February 2020, they announced the postponement of U.S.-ROK joint training to curb the spread of the novel coronavirus outbreak. The combined training in August is said to have been conducted on a reduced scale.

Moreover, at the new year press conference in January

²⁶ A ballistic missile defense system designed to intercept short- and intermediate-range ballistic missiles in their terminal phase from the ground. It captures and intercepts targets at high altitudes outside of the atmosphere or in the upper atmosphere. See Part III, Chapter 1, Section 2 regarding the ballistic missile defense system

Column

The ROK's Military Buildup and Defense Budget

The ROK transferred operational control of its armed forces to the United States military during the Korean War. While relying on the United States for most of its defense, it has built an army-centered military that emphasizes “quantity” in response to North Korea’s vast military power. However, since the 2000s, the ROK has been developing and maintaining ground, naval, and air forces that emphasize quality and balance in preparation for not only threats from North Korea, but also “threats from all directions.” These changes have been made under a policy of “self-reliant national defense” and balanced development of the three armed forces (ground, naval, and air). Recently, the ROK has transformed itself into a military force with its own offensive capabilities, possessing ballistic and cruise missiles as well as the latest equipment such as Aegis ships and F-35A fighter jets. In July 2020, President Moon Jae-in announced the development of a “ballistic missile capable of carrying one of the world’s heaviest payloads” (Hyunmoo-4).

Furthermore, according to the “2021-2025 Mid-term Defense Plan” announced by the ROK forces in August 2020, it plans to acquire the latest weapons, such as new Aegis ships, submarines, light aircraft carriers, and domestically produced next-generation fighter jets. It is also planning to build a quasi-real-time surveillance network on the Korean Peninsula using nano-satellites and UAVs, and to develop and acquire its own antiballistic missiles and the Korean Iron Dome that can intercept North Korea’s long-range artillery. The overall budget under the plan is 300.7 trillion won (about 28.6 trillion yen, an average annual increase of 6.1%) over five years. Reports have also highlighted plans to develop nuclear-powered submarines and submarine-launched ballistic missiles.

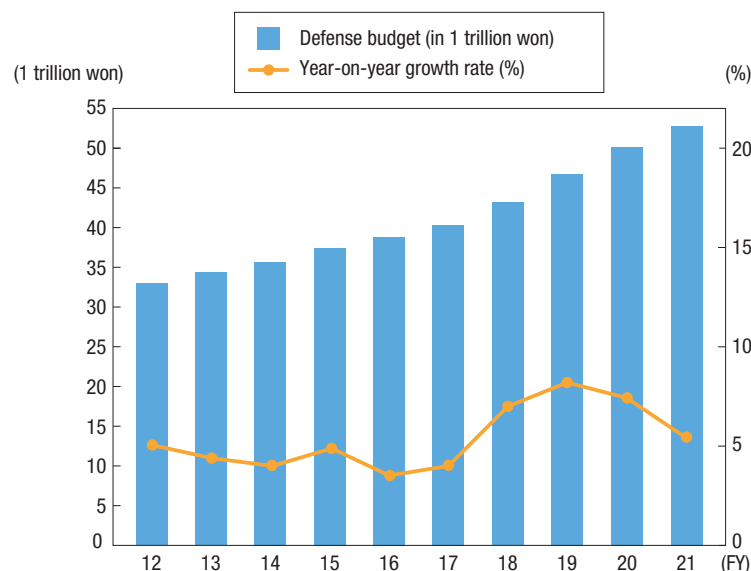
Developing and acquiring these equipment has required the

ROK’s defense budget to increase for 22 consecutive years since 2000. In 2018, it will be US\$50.6 billion in terms of purchasing power parity (an evaluation of how much goods and services can be purchased in each country, taking into account commodity prices in each country), which is already more than Japan’s defense budget of US\$49.4 billion. If the future defense budgets of Japan and the ROK are estimated based on a 1.1% growth rate of the initial budget in Japan’s Medium Term Defense Program and a 6.1% growth rate in the ROK’s Mid-term Defense Plan, this gap will widen to about 1.5 times by 2025.

President Moon Jae-in’s desire to create a strong military that “no one would dare challenge,” to equip it with the capability to carry out its own operations, and to transfer wartime operational control from the United States military to the ROK military as soon as possible are all factors said to be behind the country’s recent rapid military buildup. Observers have also pointed out that to promote dialogue with North Korea, President Moon is emphasizing the need to deal with threats from “all directions,” not just North Korea.

He has also said that the easing of tensions on the Korean Peninsula will be achieved through a two-track approach: denuclearization by the United States and North Korea, and the easing of conventional weapons tensions between North Korea and the ROK, and that progress in denuclearization will lead to the disarmament of long-range artillery and short-range missiles. However, there has been no progress seen so far. Rather, while Chairman Kim Jong-un accuses the ROK of acquiring the latest weapons and developing missiles, North Korea continues to develop nuclear weapons and missiles. The military buildup of both North Korea and the ROK is continuing at a rapid pace.

Fig. I-2-4-8 Changes in the ROK’s Defense Budget



Notes: According to the website of the Ministry of National Defense of ROK (accessed in December 2020)

2021, President Moon Jae-in mentioned in relation to U.S.-ROK joint military training that North Korea would react sensitively to every exercise, and that it would be possible to have a discussion with North Korea through the Inter-Korean Joint Military Committee. Meanwhile, the ROK carried out U.S.-ROK combined command post training in March 2021. Also, the ROK carried out a U.S.-ROK joint air training in April that year.

At the same time, the two countries have worked to deal with such issues as the transition of operational control (OPCON) to the ROK²⁷ and the realignment of U.S. Forces Korea.

For the transition of OPCON to the ROK, the roadmap for the transfer “Strategic Alliance 2015” was established in October 2010. Aiming to complete the transition by December 1, 2015, the two countries have reviewed the approach of transitioning from the existing combined defense arrangement of the U.S. and ROK Forces, to a new joint defense arrangement led by the ROK Forces and supported by the U.S. Forces.

Nevertheless, based on the increasing seriousness of North Korea’s nuclear and missile threats, the two sides decided at the 46th SCM to re-postpone the transition of OPCON, and to adopt a conditions-based approach, i.e., implementing the transition when conditions such as the ROK Forces’ enhanced capabilities are met. At the 50th SCM in October 2018, it was decided that following the transition of OPCON, an ROK military officer will serve as commander of the Future Combined Forces Command, replacing the current arrangement of a U.S. military officer serving as the commander of the U.S.-ROK Combined Forces.

In the SCM, a decision was also made on the plan to conduct an Initial Operating Capability (IOC) assessment regarding the ROK Forces’ operational capabilities in 2019. In August of the same year, an IOC assessment was conducted during combined command post exercises. At the 51st SCM in November 2019, the two parties concurred that the exercise had played an important role in verifying IOC and decided to pursue an assessment of Full Operational Capability for the Future Combined Forces Command in 2020. However, due to the impact of the COVID-19 pandemic and other reasons, only rehearsal exercises were conducted in 2020 and March 2021.

The ROK Forces plan to enhance and expand early the military capabilities leading the U.S.-ROK Alliance and defense capabilities needed to address North Korean nuclear and missile threat, which are required for the transition of OPCON, and accelerate the transition of OPCON through periodic evaluations of readiness.

With regard to the realignment of the U.S. Forces Korea, an agreement had been reached in 2003 on the relocation of the U.S. Forces’ Yongsan Garrison located in the center of Seoul to the Pyeontaek area, south of Seoul, and on the relocation of the U.S. Forces stationed north of the Han River to the south of the river. Subsequently, however, the agreement has been partially revised, due to various factors, including: in relation to the postponement of the transition of OPCON, it has been necessary for some U.S. Forces personnel to remain at Yongsan Garrison; and it was decided that the counter-fires forces of U.S. Forces Korea would remain in their location north of the Han River to counter the threat of North Korea’s long-range rocket artillery.

In July 2017 the U.S. Eighth Army headquarters relocated to the Pyeontaek area, and in June 2018 the headquarters of U.S. Forces Korea and UN Command also relocated to the same area. The realignment of U.S. Forces Korea could have a significant impact on U.S. and ROK defense postures on the Korean Peninsula, and as such it will be necessary to follow future developments closely.

Concerning defense burden sharing, whereby the ROK government bears a portion of the total stationing costs of the U.S. Forces Korea to ensure a stable stationing environment, in March 2021, the United States and the ROK reached an agreement on the 11th Special Measures Agreement (SMA). This agreement is valid for six years from 2020 to 2025. Total amount for FY2020 remains unchanged at the FY2019 level and 13.9% increase for FY 2021, compared to FY2020, while for FY2022-FY2025 the rate of increase in the ROK defense spending from the previous year will be applied.

5 Relations with Other Countries

(1) Relations with China

China and the ROK have made continuous efforts to strengthen their relations. Meanwhile, outstanding issues have emerged between China and the ROK. China has protested that the deployment of THAAD to U.S. Forces Korea would undermine China’s strategic security interests. On this point, in October 2017 the governments of China and the ROK announced that they had agreed to utilize military channels to reach a mutual understanding relating to China’s concerns about THAAD. In December 2017 President Moon Jae-in made his first visit to China since his inauguration and the two leaders agreed to establish a hotline and continue to maintain close communication, as well as vitalizing high-level strategic dialogue.

²⁷ The United States and the ROK have had the U.S.-ROK Combined Forces Command since 1978 in order to operate the U.S.-ROK combined defense system to deter wars on the Korean Peninsula and to perform effective combined operations in the case of a contingency. Under the U.S.-ROK combined defense system, OPCON over the ROK Forces is to be exercised by the Chairman of the Korea Joint Chiefs of Staff in peacetime and by the Commander of the U.S. Forces Korea, who concurrently serves as the Commander of the Combined Forces Command, in a contingency.

The 2020 Defense White Paper of the ROK also makes clear that the ROK will strengthen strategic communication with China.

(2) Relations with Russia

The ROK and Russia have agreed on cooperation in the areas of military technology, defense industry, and military supplies. In June 2018, President Moon Jae-in visited Russia as a state guest, becoming the first ROK

president to do so in 19 years. In August 2018, defense strategic dialogue was held, and it was agreed that the dialogue will be upgraded to the vice minister level and that a hotline will be established between the two countries' air forces. On the other hand, Russia opposes the deployment of THAAD by U.S. Forces Korea for the reason that it is part of the U.S. missile defense network and harms the strategic stability of the region.

Section 5

Russia

1 General Situation

President Vladimir Putin, who has been seeking the revival of Russia as a strong and influential power, successfully achieved reelection in 2018. In his inaugural address in May of that same year, President Putin stated that Russia is a strong, active and influential participant in international life, and that the country's security and defense capability are reliably secured. He also stated that quality of life, wellbeing, security and health were his main goals, and that Russia has risen like a phoenix a number of times throughout history, and believes it would achieve a breakthrough again.

At the annual presidential address to the Federal Assembly of Russia in March of that same year, held prior to the presidential election, President Putin said, "Russia ranks among the world's leading nations with a powerful foreign economic and defense potential." At that same time, President Putin talked about modernizing Russia's military equipment, including its strategic nuclear forces, and emphasized that Russia would be developing new weapons as a measure in response to the deployment of missile defense systems by the United States domestically and abroad. President Putin also expressed the recognition that Russia's military power helped maintain strategic parity in the world, and remarked that Russia is prepared to negotiate toward construction of a new system for international security and sustainable development of civilization.

The New START Treaty (Strategic Arms Reduction Treaty), which set reduction targets of strategic nuclear forces between Russia and the United States, was extended for five years at the end of January 2021, when the treaty was about to expire, during the first telephone talk between President Putin and newly inaugurated President Biden of the United States.

On the other hand, President Putin at a meeting with senior Ministry of Defence officials and defence industry executives in November 2020 mentioned that the nuclear triad would remain as the most important assurance for Russia's military safety and global security, and clarified Russia's stance of making continuous efforts in modernizing strategic nuclear weapons.

Since the 2014 Ukrainian crisis, Russia has faced a diplomatically difficult situation, with its right to attend meetings of the leaders of the Group of Seven major nations (G7 Summits) being suspended and the country being subject to economic sanctions, while economically, Russia's ability to withstand sanctions has been growing

as import substitution progressed. On the diplomatic front, Russia has been demonstrating a growing presence in the G20 and multilateral diplomatic forums in which Western countries do not participate, such as the Shanghai Cooperation Organisation (SCO) and the association of five major emerging economies (BRICS: Brazil, Russia, India, China, and South Africa). In the military field, Russia has been expanding its influence on the Middle East and North Africa through the military intervention in Syria and the involvement in the internal conflict in Libya, and it is improving the military deployment capabilities in remote areas by securing the Russian Navy bases in Syria and Sudan. In the field of arms export, Russia has been expanding the range of countries to which it exports weapons, including promoting sales of the latest weapons to NATO member Turkey and Southeast Asian countries.

In terms of domestic affairs, large-scale protests spread throughout Russia over the poisoning attempt on Alexey Navalny, the Russian opposition leader, occurred in August 2020 followed by the subsequent detention of him conducted by the Russian authorities. Protest participants requested not only the release of Mr. Navalny but some requested the resignation of President Putin. Additionally, based on a report by the hospital in Germany where Mr. Navalny received treatment, the German government announced that his poor health condition was caused by a military nerve agent of the "Novichok" group, and this information invited severe criticisms from many countries and organizations around the world. While sanctions imposed on Russia since the Ukraine crisis have not been lifted, domestic and international criticisms against the current Russian government tend to grow stronger. Some point out that such situations may lead to the further worsening of relationships between Russia and Western countries.



President Putin giving a speech at a meeting with senior Ministry of Defence officials and defence industry executives (November 2020) [Presidential Executive Office of Russia]

2 Security and Defense Policies

1 Strategic and Policy Documents

Against the backdrop of foreign policy factors, including the Ukrainian crisis and the military intervention in Syria, Russia set out its objectives and strategic priorities of domestic and foreign policies in the “National Security Strategy” revised in December 2015.

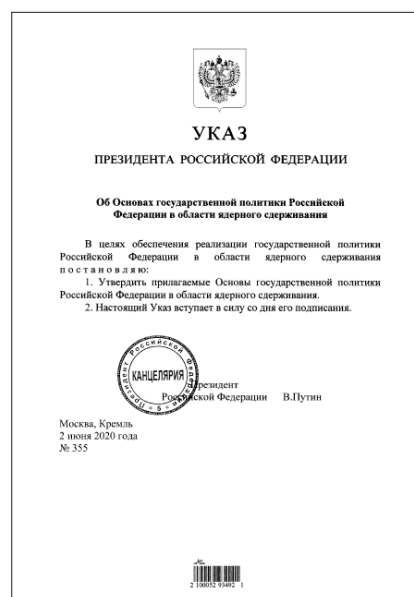
The National Security Strategy construes that Russia has an increasingly greater role in a multipolarizing world. The Strategy perceives increased activity of NATO and expansion of its member states as threats to national security, and expresses its vigilance against the U.S. deployment of missile defense (MD) systems to Europe and the Asia-Pacific region for undermining global and regional stability.

In the defense domain, the Strategy commits to giving continued priority to the role fulfilled by Russia’s military force, and to ensuring strategic deterrence and preventing military conflict by maintaining a sufficient level of nuclear deterrent capability and combat readiness of Russian military forces, including the Armed Forces of the Russian Federation (AFRF).

The Military Doctrine, revised in December 2014 as a document substantiating the principles of the National Security Strategy in the military sphere, states the existing view that while the probability of an outbreak of a large-scale war is decreasing, military risks to Russia are increasing, such as the movement of NATO’s military infrastructure closer to Russia’s borders including the expansion of NATO, and the establishment and deployment of strategic MD systems. In addition, the doctrine expresses growing alarm, defining the following as new military risks: NATO’s military buildup; the realization of the U.S. Global Strike concept; rise of global extremism (terrorism); formation of governments in neighboring countries that carry out policies threatening Russia’s interests; and the incitement of ethnic, social, and religious confrontations in Russia.

The doctrine positions nuclear weapons as an essential component for preventing the outbreak of nuclear wars and military conflicts that use conventional weapons. Regarding the criteria for its use, it states Russia reserves the right to use nuclear weapons in retaliation not only for the use of nuclear or other WMDs, but also in the event of invasion using conventional weapons, where the survival of the country itself is imperiled.

In June 2020, for the first time, Russia released a policy document, “Basic Principles of State Policy of



An executive order from the President of Russia that approves the “Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence” (June 2, 2020) [Presidential Executive Office of Russia]

the Russian Federation on Nuclear Deterrence,” which is equivalent to the so-called nuclear doctrine. Criteria for the use of nuclear weapons are the same as the criteria described in the military doctrine, but the document clarifies the conditions for Russia to newly proceed to the use of nuclear weapons. In the “Basic Principles,” it is explained that, in addition to the “individual states [...] that consider the Russian Federation as a potential adversary,” even “military coalitions (blocs, alliances)” in which these countries participate are also subject to nuclear deterrence to clarify Russia’s “red lines.”

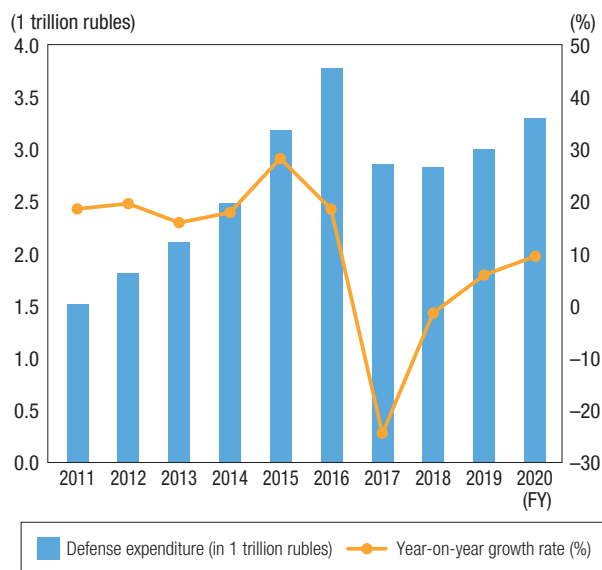
2 Defense Budget

With regard to Russia’s defense budget, the amounts executed for FY2011-FY2016 showed year-on-year double-digit growth and reached 4.4% of GDP. After that, it has remained at a level of around 3% of GDP.¹

 Fig. I-2-5-1 (Changes in Russia’s Defense Expenditure)

¹ According to documents published by Russia’s Ministry of Finance and Federal Treasury

Fig. I-2-5-1 Changes in Russia's Defense Expenditure



Note: The Information on Execution of Budgets of the Russian Federation announced by the Russian Federal Treasury (figures for FY2011-FY2019 are expenditures and figures for FY2020 are the budget amount).

3 Military Reform

Russia has implemented full-scale military reform since 1997 by presenting the three pillars of reform: downsizing; modernization; and professionalization.

Regarding the downsizing of the military forces, it was decided that AFRF would have a strength of one million personnel as of 2016. Since December 2010, Russia reorganized its six military districts into four military districts (Western, Southern, Central and Eastern Districts). On this basis, Russia established a joint strategic command in each military district and is carrying out integrated operations of its entire military forces, such as Land Forces, Navy, and Aerospace Forces units under the

control of the Military District Commander. In December 2014, the newly established position of the Northern Joint Strategic Command was given to the Northern Fleet belonging to the Western District to develop a joint-operations system in which the ground troops, the naval vessels, and the air and air defense units facing the Arctic are operated integrally. Based on this reorganization, the “four military districts and five Joint Strategic Command” system had been in operation. After January 2021, however, the Northern Fleet was designated as an independent military administration division and given a position equivalent to a military district, which made the previous system become the “five military districts and five Joint Strategic Command” system. This change resulted in the establishment of a system in which the two aspects of military command and military administration are in agreement for the entire AFRF.

Regarding the modernization of the military forces, Russia has been aiming to increase its percentage of new equipment to 70% by 2020. As of the end of 2020, the percentage is believed to have reached 70% in conventional weapons, and 86% in the nuclear triad (ICBM, SLBM, and strategic bombers), indicating that the goal was achieved.

Regarding the professionalization of the military forces, in order to make the combat readiness of the permanent readiness units effective, Russia promotes the introduction of a contract service system which selects personnel who would serve under contracts from the conscripted military personnel. In 2015, the number of contract servicemen exceeded the number of conscripted personnel for the first time, and in 2020 reportedly the former nearly doubled the latter. On the other hand, with the procurement of new equipment, the shortage of contract servicemen with expert knowledge has been suggested.

3 Military Posture and Trends

Russia's military forces are comprised of forces such as the AFRF, the Border Guard Service of the Federal Security Service of the Russian Federation (FSB), and the Federal National Guard Service of the Russian Federation. The AFRF consists of three services and two independent forces: Land Forces; Navy; Aerospace Forces; Strategic Missile Forces; and Airborne Forces.

 See Fig. I-2-5-2 (Location and Strength of Russian Military [image])

1 Nuclear Forces

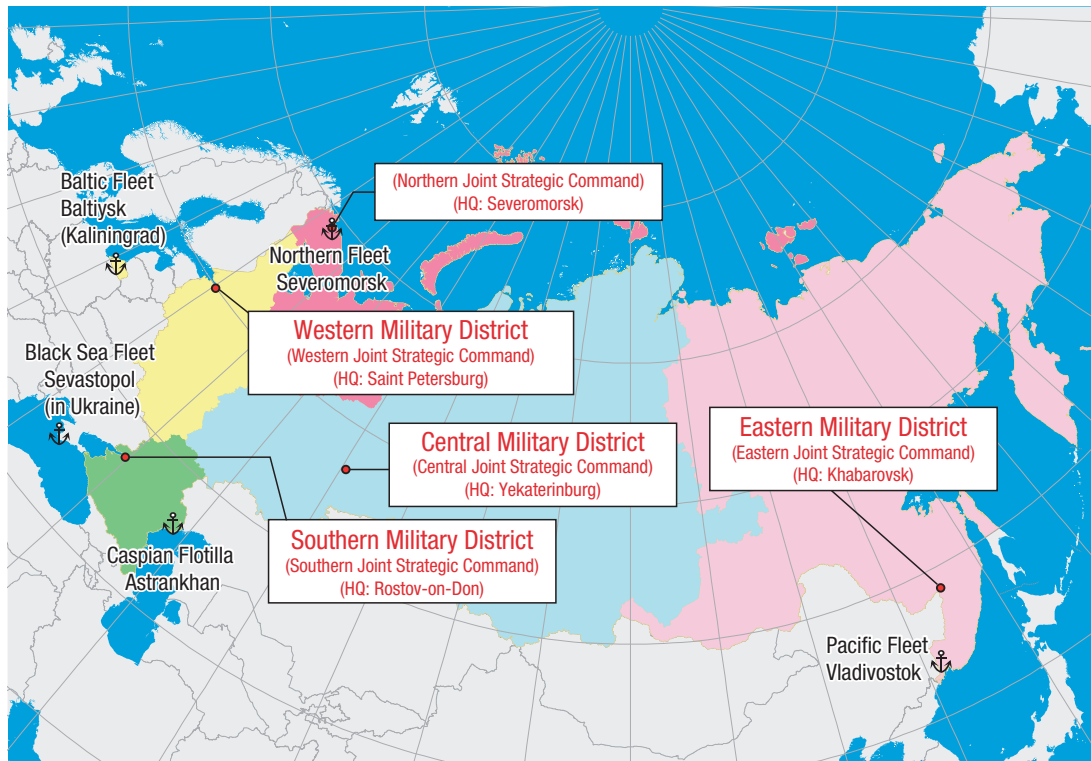
Russia emphasizes its nuclear forces to secure its global position, to strike a balance with the nuclear forces of the United States and to supplement its inferiority in

conventional forces. Russia is thus making efforts to maintain readiness.

Russia possesses ICBMs, SLBMs, and long-range bombers comparable to the United States in scale.

In 2011, Russia started the deployment of “Yars” ICBM, which is considered a multi-warhead version of the “Topol-M” ICBM. It is currently developing the “Sarmat” heavy ICBM, which is believed to be capable of carrying a warhead with the capability to breach missile defense systems. Four Borey-class SSBN vessels, which carry the new-type SLBM “Bulava,” were commissioned. There are plans to deploy four such vessels each to the Northern Fleet and Pacific Fleet in the future. Russia also continues to carry out the modernization renovation of a

Fig. I-2-5-2 Location and Strength of Russian Military (image)



		Russia
Total military forces		Approx. 900,000 troops
Ground forces	Ground troops	Approx. 330,000 troops
	Tanks	T-90, T-80, T-72, etc. Approx. 2,800 (Not including mothballed tanks. Approx. 13,000 including mothballed tanks)
Maritime forces	Warships	1,130 vessels, Approx. 2,020,000 tons
	Aircraft carriers	1 vessel
	Cruisers	4 vessels
	Destroyers	12 vessels
	Frigates	16 vessels
	Submarines	69 vessels
	Marines	Approx. 35,000 troops
Air forces	Combat aircraft	1,380 aircraft
	Modern fighter aircraft	MiG-29 × 110 Su-30 × 132 MiG-31 × 117 Su-33 × 17 Su-25 × 199 Su-34 × 122 Su-27 × 119 Su-35 × 94 (Fourth generation fighter aircraft: Total 910)
	Bombers	Tu-160 × 16 Tu-95 × 60 Tu-22M × 61
Reference	Population	Approx. 141.72 million
	Term of service	1 year (In addition to conscription, there is a contract service system)

Source: "The Military Balance 2021," etc. Ground troops include 280,000 ground force personnel and 45,000 airborne unit personnel.



Improved Kilo-class submarine "Volkhov" (capable of carrying the Kalibr SLCM system) commissioned and deployed in the Pacific Fleet in October 2020 [Russian Ministry of Defence]

Tu-95 and Tu-160 long-range bombers.

With respect to non-strategic nuclear forces, the Intermediate-Range Nuclear Forces (INF) Treaty signed by the United States and the Soviet Union ended in August 2019. Russia has repeatedly expressed its stance of not manufacturing and not deploying short- and intermediate-range missiles targeting Europe and other regions, unless the United States deploys ground-launched short- and intermediate-range missiles. On the other hand, Russia is working to deploy missiles with various launch platforms such as the ground-launched missile system "Iskander," which is believed to be capable of carrying either conventional or nuclear warheads, the **sea-launched cruise missile system "Kalibr,"**

the air-launched cruise missile "Kh-101," and the air-launched ballistic missile "Kinzhal." Concerning the "Kalibr" SLCM system, in particular, Russia has been promoting the deployment of frigates and submarines capable of carrying this missile system in the Far East. Since this may bring a significant impact on the security environment surrounding Japan, close attention must be paid to any development of the situation.

2 New Types of Weapons

Since 1999, the membership of Eastern European countries to NATO, so-called "NATO's Eastward Expansion," has been promoted. At the same time, Russia is increasing alertness to the moves by the United States that has been advancing missile defense (MD) systems domestically and overseas.

Amid such a situation, President Putin at the annual presidential address to the Federal Assembly of Russia in March 2018 expressed the view that the MD systems both in and outside of the United States are being deployed as a measure in response to ballistic missiles, which are the foundation of Russian nuclear forces, and introduced the following five new types of weapons as a means to breach the MD systems.

- ICBM "Sarmat," which is believed to be capable of attacking targets via the North Pole or the South Pole with no substantial range limitation
- Hypersonic glide vehicle (HGV) "Avangard," which is claimed to be capable of flying at speeds greater than Mach 20 in the intercontinental atmosphere
- Air-launched ballistic missile (ALBM) "Kinzhal," which can be attached to MiG-31K fighters
- **Nuclear cruise missile "Burevestnik,"** which is capable of flying at lower altitudes with no substantial range limitation

ICBM "Sarmat"

Specifications, performance

Under development

Description

New heavy ICBM. Capable of carrying a broad range of warheads such as hypersonic warheads and of attacking targets via the North Pole or the South Pole with no substantial range limitation; Scheduled to be deployed in 2021.



[Russian Ministry of Defence]

Sea-launched cruise missile system "Kalibr"

Specifications, performance

Firing range: Submarine-launched type (anti-surface) - approx. 2,000 km; Surface ship-launched type (anti-surface) - approx. 1,500 km
Speed: Mach 0.8



[Russian Ministry of Defence]

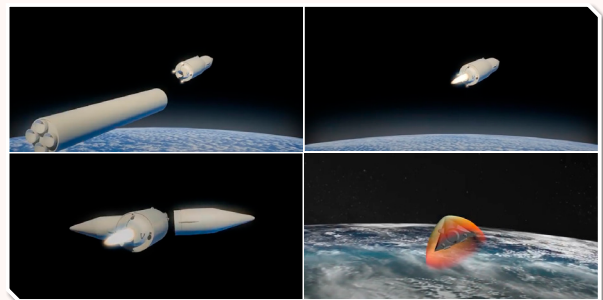
Description

Once used in operations in Syria. It can be loaded on various platforms and some suggest that it served as the basis for 9M729, which is a ground-launched intermediate-range cruise missile of the kind whose development and possession has been prohibited under the INF Treaty as alleged by the United States.

HGV "Avangard"

Description

Viewed as capable of flying through the atmosphere at a speed exceeding Mach 20 and of avoiding MD systems by changing altitudes and trajectories. Started to be deployed in December 2019.



[Russian Ministry of Defence]

- **Nuclear-powered unmanned underwater drone weapon “Poseidon,”** which is claimed to be able to navigate at high-speed in the deep sea

In 2019, Russia also announced for the first time that the sea-launched hypersonic cruise missile (HCM) “Zircon,” which has a believed range of over 1,000km with the maximum speed of Mach 9, was under development.

Of these new types of weapons, HGV “Avangard” and ALBM “Kinzhalt” are already deployed, while the mass production of ICBM “Sarmat” is believed start in 2022. In October 2020, the Russian Ministry of Defence

ALBM “Kinzhalt”

Specifications, performance

Speed: Mach 10 or more
Firing range: 2,000 km or more

Description

Air-launched ballistic missile loaded on a fighter that can be maneuvered during flight. Some point out that ALBM is an air-launched model of a ground-launched short- range ballistic missile “Iskander.”



[Russian Ministry of Defence]

Nuclear-powered cruise missile “Burevestnik”

Specifications, performance

Under development

Description

Viewed as capable of flying at lower altitudes and on an unpredictable trajectory with no substantial range limitation due to being nuclear-powered. Some point out that the explosion that occurred in a military facility in August 2019 was caused by an experiment in developing this weapon.



[Official YouTube Channel of the Russian Ministry of Defence]

Nuclear-powered unmanned underwater drone weapon “Poseidon”

Description

Poseidon is nuclear-powered and has a believed range of up to 10,000 km while carrying 2 megaton nuclear warheads

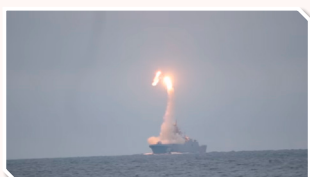


[Official YouTube Channel of the Russian Ministry of Defence]

HCM “Zircon”

Description

As “Zircon” shares the launcher with the cruise missile system “Kalibr,” it can be launched from new types of vessels of the Pacific Fleet



[Official YouTube Channel of the Russian Ministry of Defence]

announced a successful launch test of HCM “Zircon,” and President Putin, in December of the same year, mentioned that the development of “Zircon” had been nearly completed.

3 Conventional Forces and Other Issues

Russia is developing and procuring equipment in accordance with the State Armaments Program (GPV: Gosudarstvennaya Programma Vooruzheniya). It is also moving ahead with the development, procurement, and deployment of new equipment, such as the “Su-57” currently under development as the so-called “fifth generation fighter” and the T-14 Armata tank, in addition to the introduction of the Su-35 fighter and the surface-to-surface missile system “Iskander.” Russia has also announced that its Aerospace Forces focus on the integration with manned aircraft in the development of unmanned aerial vehicles. Regarding this matter, in September 2019, the Ministry of Defence of Russia disclosed images of a cooperative flight test of heavy unmanned combat aerial vehicle “Okhotnik” and the 5th generation fighter Su-57. In December 2020, another cooperative flight of a Tu-95 long-range bomber and unmanned aerial vehicle was also reported.

The Russian Navy currently has one conventional powered aircraft carrier, but reportedly plans to acquire a nuclear-powered aircraft carrier by the end of 2030. Furthermore, in July 2020, Russia undertook the construction of two of its first amphibious assault ships, which are expected to be delivered to the Russian Navy by 2027. In the past, Russia ordered from France two Mistral-class amphibious assault ships in 2011, but the contract for that order was cancelled amid the intensifying conflict between Russia and the West following the Ukraine crisis in 2014.



Heavy unmanned combat aerial vehicle “Okhotnik” flying jointly with the 5th generation fighters
[Russian Ministry of Defence]

4 Space and Electromagnetic Domain

The AFRF has also been stepping up its activities in the realms of space and electromagnetic spectrum in recent years. Russia has been promoting the development of anti-satellite weapons, such as the “Nudol” anti-satellite missile system, for which multiple launch tests are said to have been conducted. Since 2013, Russia has put satellites into both low and geostationary orbits to conduct rendezvous and proximity operations (RPO), which have repeatedly been observed engaging in frequent RPO with other countries’ satellites on geostationary orbits. In July 2020, United States Space Command (USSPACECOM) announced that there was proof that Russia had conducted a test of a space-based anti-satellite weapon in Earth orbit. Commander General John Raymond at USSPACECOM criticized in his statement that, “This is further evidence of Russia’s continuing efforts to develop and test space-based systems.”

In the electromagnetic domain, since 2009, the AFRF have established an Electronic Warfare (EW) Unit, and many new EW systems have been procured and distributed or allocated to each service and force. Russia is suspected of stepping up activities using weapons of electronic warfare, with accusations that AFRF based on the Kola Peninsula in the Arctic Circle jammed GPS signals while the major NATO military exercise Trident Juncture was taking place in 2018.

5 Trends Related to the AFRF (General)

Since 2010, the AFRF has been conducting large-scale round-robin exercises in each military district, with the objective of verifying the combat readiness of the military districts, etc.² These exercises are helping to improve the long-distance mobilization capability of the AFRF. In 2020, Maneuvers “Kavkaz 2020” was held in the Southern Military District with approximately 80,000 military personnel and about 1,000 soldiers from six countries, including China and Iran, participated in the exercises. In recent years, the scale of these exercises, along with the overseas participants, tends to be expanding.

In December 2020, Russia conducted large-scale strategic nuclear-force exercises that involved launching of several ICBM and SLBM. In the exercises, a new-type SLBM was launched for the first time from a Borey-class SSBN in the Sea of Okhotsk.

In the Arctic Region, Russia is developing coastal surveillance radar networks for enhanced vigilance and surveillance. At the same time, Russia is rebuilding



Russia's military residency base "Arctic Trefoil" on Alexandra Land
[Russian Ministry of Defence]

airfields and deploying Tu-22 medium-range bombers and Mig-31 interceptor fighters, while also deploying surface-to-air missiles and surface-to-ship missiles to develop sufficient preparedness for dealing with airborne threats from the north and attacks from ships. Along with these developments, Russia has built a large-scale residential facility for personnel at the base in two places within the Arctic Region.

In addition to the development of such military facilities, the AFRF has also been conducting such activities as strategic nuclear deterrence patrols by SSBN and patrol flights by long-range bombers. For example, Tu-95 and Tu-160 long-range bombers have frequently been observed flying through international airspace off the Alaskan coast and over the Barents Sea and Norwegian Sea.

Against the background of such activities in the Arctic Region, this region had been attracting attention from Russia and many other countries due to increased mining potential of reserve resources and enhanced usefulness as a sea route identified with sea ice melting caused by global warming in recent years. For this reason, Russia has been promoting the system to defend the national interest in the Arctic Region, and clearly stating in various policy documents Russia’s rights in the Arctic Region and the roles of the AFRF in defending the national interest. For example, in the Strategy for Developing the Russian Arctic Zone and Ensuring National Security until 2035, revised in October 2020, Russia clearly states “ensuring operational system adequate for the Arctic Circle,” “developing modern weapons, and military and special equipment suitable for the Arctic environment,” and “developing base infrastructure” as specific issues to be addressed in order to ensure the military security in the Arctic Region.

² The exercises were conducted primarily in the Central, Western, Eastern, and Southern Military Districts, and are called “Tsentr (Central),” “Zapad (West),” “Vostok (East),” “Kavkaz (Caucasus),” respectively.

Russia thus appears to be stepping up military activities, so close scrutiny of developments in this regard will be required.

With regard to the development of AFRF pertaining to the COVID-19 infection, when the infection was spreading, in February 2020 the Russian Ministry of Defence sent two Aerospace Force's transport aircraft carrying CBRN (Chemical, Biological, Radiological, and Nuclear) experts, military physicians, and virologists to Wuhan, China, and transported hundreds of people in addition to Russian citizens to Russia. The AFRF mobilized more than 30,000 personnel for conducting infectious disease countermeasures, in which the CBRN Protection Force carried out disinfection work for military facilities and other city blocks, and accepted infected people at military hospitals. Efforts have been made to increase the number of hospital beds with the aim of also offering medical support to the private sector, such as increasing the number of beds of the hospital ship held by the Pacific Fleet and newly constructing 16 medical centers nationwide. Russia has also carried out support activities such as transportation of medical relief goods for other countries. Furthermore, the 48th Central Scientific Research Institute of the Ministry of Defence worked with the Gamaleya National Center of Epidemiology and Microbiology under the Ministry of Health and jointly developed Russia's own "Sputnik V" COVID-19 vaccine.

Meanwhile, Russia's annual military parade on the Victory Day in May was postponed to June due to the COVID-19 outbreak. However, other than the parade, exercises and training of the AFRF seem to have been conducted as normal, and active military activities have been confirmed, including launching tests of anti-satellite missiles and responses to U.S. aircraft above the Mediterranean Sea and the Alaska Region.

6 Russian Forces in the Vicinity of Japan

Russia newly established the Eastern Military District and the Eastern Joint Strategic Command in 2010. Land Forces, the Pacific Fleet, and the Air Force and Air Defense Units have been placed under the Military District Commander, who conducts unified operation of these services.

The current presence of the AFRF in the Far East region is significantly smaller than it was at its peak. However, a considerable scale of military forces, including nuclear forces, still remains in the region. Russian armed forces in the vicinity of Japan are generally increasing activity, including the trend

related to deployment of new units and military facility development. In recent years, Russia has also been deploying the latest equipment in the Far East.

Given that the AFRF set their basis of operation on maintaining the combat readiness of their strategic nuclear units and dealing with conflicts through the intertheater mobility of its round-the-clock readiness units, it is necessary to keep our attention on the positioning and trends of the AFRF in the Far East region while also keeping in mind the trends of units in other regions.

(1) Nuclear Forces

As for strategic nuclear forces in the Far East region, one Delta III-class SSBN and two Borey-class SSBNs equipped with SLBMs are deployed in and around the Sea of Okhotsk, and approximately 30 Tu-95 long-range bombers are deployed in Ukrainka. Russia is prioritizing the reinforcement of its maritime strategic deterrence posture which had been greatly scaled-down compared to the former Soviet Union, and as part of these efforts, it plans on deploying four Borey-class SSBNs to the Pacific Fleet by 2020.

(2) Ground Forces

The Eastern Military District now consists of ten brigades and two divisions with approximately 80,000 personnel in total as well as a marine brigade equipped with amphibious operations capability. The Eastern Military District has introduced new equipment, such as the "Iskander" surface-to-surface missile system, "Bal" and "Bastion" surface-to-ship missiles, and the "S-400" surface-to-air missile system.

(3) Naval Forces

The Pacific Fleet is stationed or deployed at its main bases in Vladivostok and Petropavlovsk-Kamchatskiy. The fleet is comprised of approximately 260 ships with a total displacement in the region of approximately 610,000 tons, including approximately 20 major surface ships and approximately 20 submarines (approximately 13 of which are nuclear powered submarines) with a total displacement of approximately 220,000 tons. In December 2020, the "Gremyashchiy"—an improved version of the Steregushchiy-class frigate carrying "Kalibr" cruise missiles—which was newly built for the Pacific Fleet was commissioned. In April 2021, the Udaloy-class modernized frigate "Marshal Shaposhnikov" conducted a test launch of "Kalibr" cruise missiles in the Sea of Japan for the first time, and returned to part of the permanent readiness forces as the first vessel in the Pacific Fleet armed with "Kalibr" cruise missiles.

Russian frigate "Gremyashchiy"

Specifications, performance

Full-load displacement: 2,235 tons
 Maximum speed: 26 knots
 Main armament: SS-N-30A land-attack cruise missile (maximum firing range: 1,500 km), SS-N-26 anti-ship cruise missile (maximum firing range: 300 km), 9M96 surface-to-air missile (maximum firing range: 60 km)
 On-board aircraft: One helicopter (Ka-27)



[Russian Ministry of Defence]

Description

Russian Navy's new-type frigate. One frigate armed with "Kalibr" cruise missiles and three without are assigned to the Pacific Fleet.

(4) Air Forces

In the Eastern Military District, Russia deploys approximately 320 combat aircraft from its Aerospace Forces and Navy combined. Existing models are being modernized and new models, such as the Su-35 fighters and the Su-34 fighter-bombers, are being introduced to improve their capabilities.

(5) Operations in the Vicinity of Japan

In the vicinity of Japan, the AFRF has been generally increasing its activities, including exercises and drills which are believed to be conducted for objectives such as verifying the results of the military reform.

The number of exercises carried out by the Russian Land Forces in the areas adjacent to Japan has decreased from the peak. However, its activities are generally increasing.

With regard to naval vessels, their activities are generally increasing in recent years. For example, various exercises and long-distance voyages have been carried out by Pacific Fleet vessels, along with patrols by nuclear-powered submarines. In September 2018,

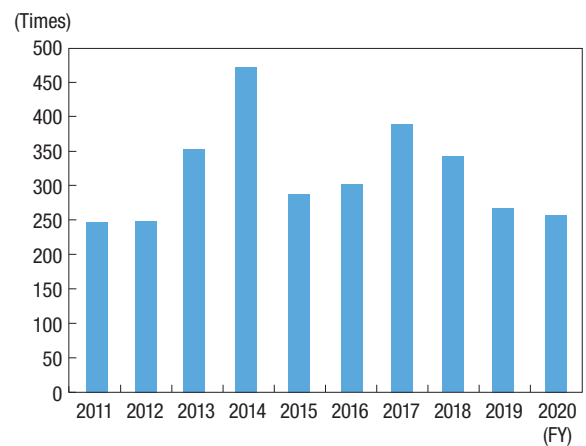
28 naval vessels including a Slava-class guided missile cruiser passed through the Soya Strait. This was the largest number of vessels announced by the Ministry of Defense (MOD) as having transited this strait at the same time since the end of the Cold War.

Regarding aircraft, since the resumption of the patrol activities by its strategic aviation units in 2007, Russia has been increasing flights by long range bombers. Also, there were flights of Tu-95 bombers refueled in mid-flight and supported by A-50 early warning and control aircraft and Su-27 fighters as well as flights of Tu-160. While the number of scrambles against Russian aircraft fell from the previous year, Russian aircraft continued to be active in 2020, with one incursion into Japanese airspace, involving SDF aircraft scrambled against the Russian aircraft, confirmed to have occurred. Following the joint air patrol in July 2019, it was confirmed that, in December 2020, two Russian Tu-95 bombers carried out a long-distance joint flight with Chinese H-6 bombers over the Sea of Japan and other places.

See Fig. I-2-5-3 (Changes in the Number of Scrambles against Russian Aircraft)

Fig. I-2-5-3

Changes in the Number of Scrambles against Russian Aircraft



4 Russian Forces in Japan's Northern Territories

Since 1978 during the former Soviet Union era, Russia has redeployed Land Forces units on Kunashiri, Etorofu, and Shikotan Islands of the Northern Territories, which are inherent territories of Japan. While the Russian troop strength is thought to be far less than that at peak times, one division is still stationed in Kunashiri and Etorofu Islands. Furthermore, tanks, armored vehicles, various types of artillery, and anti-air missiles are deployed.

Russia has been proceeding with the development of military facilities in the Northern Territories in recent years and tends to deploy the latest equipment. In November 2016, Russia announced that it deployed coastal (surface-

to-ship) missiles to Etorofu and Kunashiri Islands. In January 2018, the new civilian airport built in 2014 in Etorofu Island in addition to Tennei military airfield was opened up to joint military and civilian use, with three Su-35 fighter aircraft reportedly deployed to the new airport in August 2018.

The deployment of the latest type main battle tank "T-72B3" as equipment of the Land Forces was confirmed by 2018, while the latest medium-range unmanned reconnaissance vehicle "Orlan-10" has been observed since 2015 being used in the exercises of Land Forces units. Furthermore, in December 2020, media related to



Medium-sized unmanned reconnaissance vehicle "Orlan-10"
[Russian Ministry of Defence]



Ground-deployed electronic warfare (EW) system "Leer-3"
[Official YouTube Channel of the Russian Ministry of Defence]

the Russian Ministry of Defence reported the deployment of **"S-300V4" surface-to-air missile** (maximum firing range of 400 km) in Etorofu and Kunashiri Islands.

Russia also continues to carry out military exercises on the Northern Territories, and anti-landing exercises were conducted in Etorofu and Kunashiri Islands in September 2020 and February 2021, respectively. A total of 1,000-1,500 military personnel and approximately 200-300 equipment and machines from the Eastern Military District participated in these exercises.

As described above, Russia continues to station AFRF in the Northern Territories, which are inherent territories of Japan, and has recently been increasing the AFRF's activities in the territories under de facto occupation. Some point out that such developments reflect the Russian people's heightened awareness of territorial integrity due to the Ukrainian crisis, as well as the rising military importance of the Northern Territories adjacent to the Sea of Okhotsk, an operating area of SSBN.

Closer attention must be paid to Russian military movements in the Far East, including the Northern Territories.

Latest type main battle tank "T-72B3"

Specifications, performance

Speed: Maximum speed 65 km/h
Main armament: 125 mm smoothbore

Description

Modernized version of "T-72." It is believed to have greatly enhanced firepower, protective capability and mobility.



[Russian Ministry of Defence]

Surface-to-air missile system "S-300V4"

Specifications, performance

Maximum firing range: 400 km
Maximum altitude: 37 km

Description

Air defense missile said to have capabilities to deal with stealth aircraft.



[Russian Ministry of Defence]

5 Relations with Other Countries

1 General Situation

Russia considers the realization of its national interests as a guiding principle of its foreign policy, recognizing the multipolarization of international relations, the shift of global power to the Asia-Pacific region, and the growing importance of force in international relations.³ Moreover, based on its National Security Strategy, Russia engages in open, rational, and pragmatic diplomacy to protect its national interests. It aims to pursue multidirectional diplomacy by ruling out futile confrontation and acquiring as many partners as possible around the world.

Furthermore, Russia aspires to deepen its relations with the Asia-Pacific countries, seen as drivers of the global economy, and in recent years, has attached importance to China and India. Moves to strengthen collaboration with China in particular have been seen since the Ukrainian crisis, seemingly in inverse proportion to the deepening of Russia's conflict with Western countries.

Meanwhile, Russian efforts to strengthen its cooperative relations with the West are still facing challenges after the Ukrainian crisis and due to criticisms from Western countries regarding the detention of Russian opposition leader. Attention will be paid to how

³ According to The Foreign Policy Concept of the Russian Federation (November 2016)

Russia would balance its posture of economic-centered and benefit-focused foreign policy with Russia's politics and diplomacy including security in order to develop its relations with other countries.

2 Relations with the United States

President Putin has striven to deepen cooperative relations with the United States in the economic domain, while opposing the United States on any action Russia considers as “a U.S. attempt to encroach on Russia's strategic interests.”

On the military front, feeling that the United States' installation of missile defense systems both at home and abroad — including in Europe and the Asia-Pacific — undermines global and regional security, Russia has criticized these moves for upsetting the strategic balance. Russia is also moving forward with the development of new strategic weapons that are said to be capable of reliably penetrating missile defense systems.

However, since the United States suspended military exchanges with Russia in March 2014 over the Ukrainian crisis, there have been frequent instances of both countries' aircraft and ships coming into close proximity with each other. In November 2020, U.S. Navy's guided-missile destroyer transited in the vicinity of Peter the Great Bay off the coast of Vladivostok, Russian Far East, against which the Russian Ministry of Foreign Affairs in a statement criticized the U.S. vessel's intrusion into the Russian territorial waters as “public provocation.” Since the time of the Soviet Union, Russia has been claiming this Bay as its internal waters under international law, while the United States refutes that the water the U.S. vessel navigated is not the Russian territorial water.

The United States is also demonstrating increasingly vigilance over Russian activities in space. In February 2020, United States Space Command (USSPACECOM) commander Gen. John Raymond described recent Russian satellite behavior as “unusual and disturbing” and criticized Russia for activities that “do not reflect the behavior of a responsible spacefaring nation.” In addition, in April 2019, he announced that Russia had conducted an anti-satellite weapons test, noting that this was “further proof of Russia's hypocritical advocacy of outer space arms control proposals designed to restrict the capabilities of the United States while clearly having no intention of halting its own counterspace weapons programs.”

Between the United States and Russia, the Intermediate-Range Nuclear Forces (INF) Treaty ended in August 2019 during the former Trump administration after having gone through a series of processes originating from the withdrawal announcement of the U.S. side. In

November 2020, the United States pulled out of the Open Skies Treaty, which was signed by the Western countries and Russia allowing its participants to mutually conduct unarmed observation and surveillance flights, and this was followed by Russia announcing its withdrawal in January 2021.

With regard to the New START Treaty (Strategic Arms Reduction Treaty), which set the upper limit of strategic nuclear forces between Russia and the United States, President Putin and newly inaugurated President Biden of the United States agreed on its unconditional extension for five years during their first telephone talk in January 2021, just before the expiration of the treaty in February of the same year.

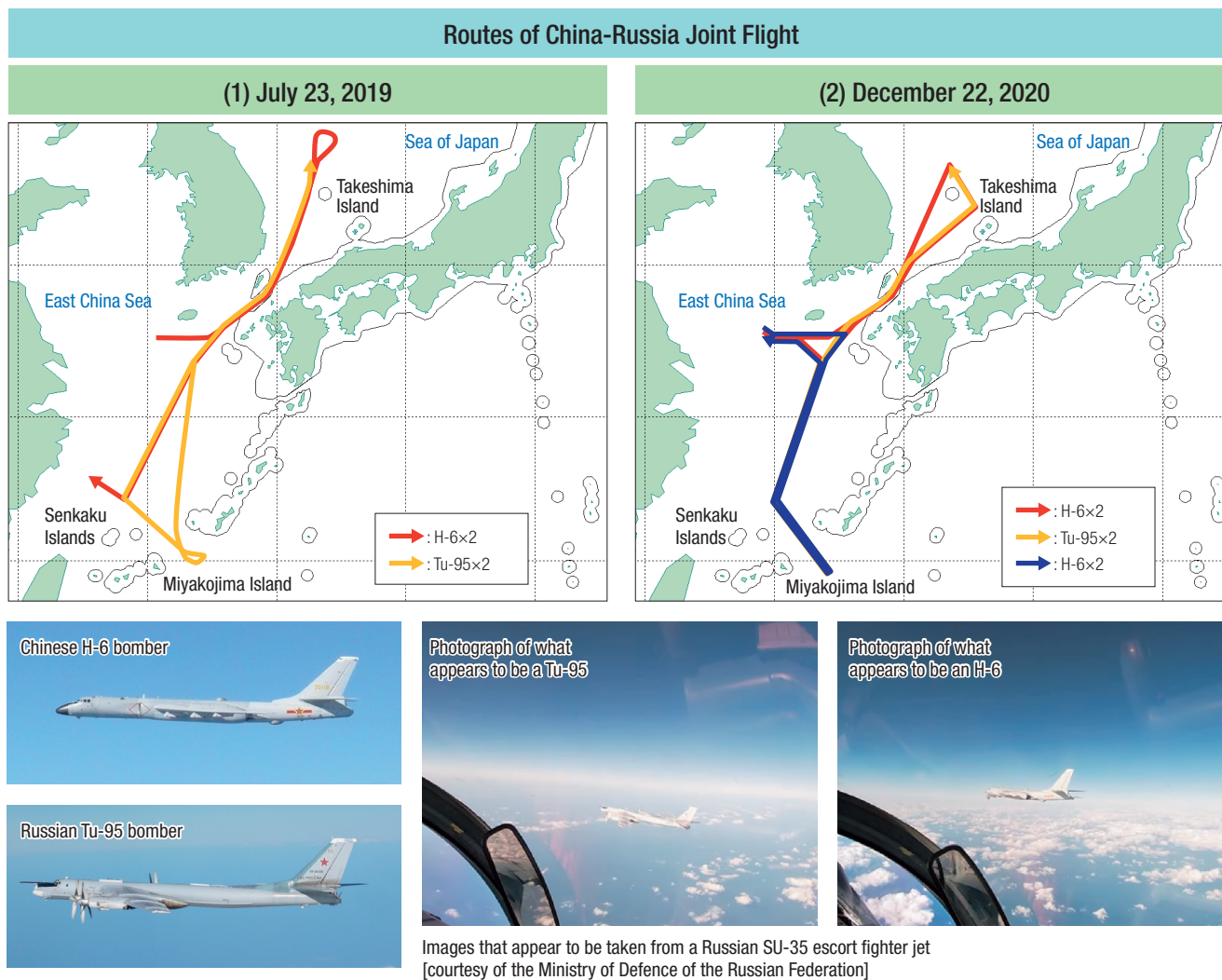
3 Relations with China

Russia continues to advance close military cooperation with China. Export agreements on new armaments such as the S-400 surface-to-air missile system and Su-35 fighter jets were concluded in 2015, and since 2012, Russia and China have been conducting joint naval exercise “Joint Sea.” Russian Tu-95 bombers and Chinese H-6 bombers have jointly carried out the “China-Russia joint air patrol,” which involved flying from the Sea of Japan to the East China Sea. Most recently, the joint air patrol was conducted over the Sea of Japan and the East China Sea in July 2019, and from the Sea of Japan through the East China Sea to the Pacific Ocean in December 2020.

A package of documents on military and military-technical cooperation were signed at a meeting of the China-Russia Intergovernmental Joint Commission on Military-Technical Cooperation held in Moscow September 2019, which was attended by Russian Minister of Defence Shoigu and Vice Chairman of the Chinese Central Military Commission Zhang. At the China-Russia summit meeting that preceded this meeting in June, the leaders of both countries issued the Joint Statement on Developing Comprehensive Partnership and Strategic Interaction Entering a New Era. Regarding this statement, authorities of both countries both clearly denied that they had formed a military alliance. However, in a meeting held in October 2020, President Putin remarked in responding to the question regarding the Chinese-Russian military alliance, “Theoretically, it is possible to envisage the military alliance but our cooperation and mutual trust have reached the level where such alliance is not necessary. [...] However, we don't intend to eliminate the possibility either.” Therefore, the development of the military cooperation between these two countries is attracting attention.

In December 2020, Chinese and Russian Defense Ministers had a video teleconference and agreed to

Fig. I-2-5-4 China-Russia Joint Flights (2019, 2020)



extend the agreement on notifications of ballistic missile and carrier rocket launches for 10 years.

See Fig. I-2-5-4 (China-Russia Joint Flight [1. July 23, 2019] [2. December 22, 2020])

4 Relations with Former Soviet Republics

Russia positions the development of bilateral and multilateral cooperation with the Commonwealth of Independent States (CIS) as one of its most important foreign policy objectives. Russia considers that its vital interests are concentrated in the territories of the CIS, and deploys its troops in Moldova, Armenia, Tajikistan, Kyrgyzstan, and Georgia (South Ossetia, Abkhazia), which withdrew from the CIS in August 2009 announced its withdrawal from CIS. Through the conclusion of an alliance and strategic partnership treaty with Abkhazia in November 2014, the conclusion of an alliance with

South Ossetia in 2015, and other efforts, Russia has been working to ensure its military influence.

However, it is suggested that there have been some signs of decreasing Russian influence on the former Soviet bloc, which emerged in some situations and events in 2020 such as the political instability in Belarus and Kyrgyzstan, intensifying conflict in Nagorno-Karabakh, and the birth of anti-Russian government in Moldova. Particularly, in the Nagorno-Karabakh conflict, one of the parties involved, Armenia, is a member state of CIS's Collective Security Treaty Organization (CSTO).⁴ Thus, Armenia and Russia have formed a military alliance, but Russia's involvement in this conflict was limited to acting as a broker to lead ceasefire agreements and dispatching peacekeeping units for the reason that the battle relating to the conflict had not directly reached the Armenian territory. In addition, Maia Sandu, who won Moldova's presidential election in December 2019

⁴ CSTO is a military alliance consisting of six member states, namely Russia, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, and Armenia. Article 4 of the 1992 Collective Security Treaty, which is the grounds for establishing the Collective Security Treaty Organization (CSTO), states that, "In the event of an act of aggression against any of the participating States, all other participating States will provide him with the necessary assistance, including military, and will also provide support at their disposal in exercising the right to collective defense in accordance with Article 51 of the UN Charter."

Military Clashes over Nagorno-Karabakh

In the early morning hours of September 27, 2020, military clashes broke out at several points along the border between Azerbaijan and the Armenian-majority region of Nagorno-Karabakh in the Caucasus (see table below). Over the next 44 days, the conflict between Azerbaijan and Armenia evolved into a conflict involving approximately 7,000 casualties, including civilians.



A Nagorno-Karabakh soldier shells the Azerbaijani side of the border (September 2020) [AFP/ Jiji]



Turkish Bayraktar TB2 UAV [BAYKAR]

The Azerbaijani task force suffered major damage in the beginning, but then gained the upper hand, taking control of the southern part of Nagorno-Karabakh and much of the territory previously occupied by Armenia. Observers have pointed out one reason for this is Azerbaijani's use of Unmanned Aerial Vehicles (UAVs). The Azerbaijani military operated its Israeli and Turkish UAVs very effectively, and it is believed that this contributed greatly to the outcome.

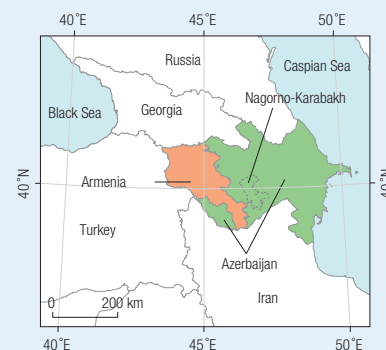
The country is then believed to have used a large number of Soviet-made transport planes as decoys to enter Armenia's air defense network and launch a saturation attack, while simultaneously deploying Israeli-made Harop self-destructing UAVs to destroy Armenia's main air defense asset, the Russian S-300 surface-to-air missile system. After suppressing the Armenian air defense network in this way, it is believed that the Turkish-made Bayraktar TB2 attack UAV was deployed to destroy the enemy's ground forces. The Azerbaijani Defense Ministry posted aerial footage from its drones on social media, and the story became widely known around the world.

Although this was just a local clash, it was the first example of a full deployment of UAVs between two regular military forces. Azerbaijan's success in using UAVs against Armenia was a clear advertisement for Turkish and Israeli UAVs. Ukraine, which is in conflict with Russia, decided to purchase additional Bayraktar TB2s from Turkey in November 2020.

In addition to Israel and Turkey, China and Iran are also manufacturing and exporting combat UAVs such as the ones used by the Azerbaijani military in the recent battle. Their use is rapidly spreading because they pose no risk to their operators and are cheaper than offensive weapons such as cruise missiles. In the near future, it is expected that these UAVs will be used in all kinds of battles, and countries will be required to deal with new aspects of combat through a variety of UAVs.

What is Nagorno-Karabakh?

An Armenian-populated region in Azerbaijani territory, known as *Artsakh* in Armenian. In 1988, at the end of the Soviet era, a campaign was launched to incorporate Nagorno-Karabakh, an autonomous province within Azerbaijan's territory, into Armenia. Conflict between Armenia and Azerbaijan intensified, leading to a dispute. In 1991, Armenian residents declared that the Nagorno-Karabakh Republic was independent. Azerbaijan lost control of almost all of Nagorno-Karabakh and surrounding areas, and a ceasefire agreement was reached in 1994. While direct dialogue toward a solution has been mediated by the Minsk Group of the Organization for Security and Co-operation in Europe (OSCE), co-chaired by the United States, France, and Russia, sporadic large-scale military clashes have occurred. A ceasefire agreement for the military conflict starting on September 27, 2020, was reached in November of the same year through mediation by Russia. As a result of the ceasefire agreement, Azerbaijan has regained control of parts of Nagorno-Karabakh and surrounding areas, but the legal status of Nagorno-Karabakh remains unresolved.



calls for the withdrawal of Russian troops from the Transnistria region in the eastern part of the country (many Russian residents live in this region, which has not been governed by the government of Moldova since the “declaration of independence” from Moldova in 1990), and this may affect the stationing of the AFRF in the region going forward.

Following Russia’s “annexation” of Crimea, sporadic clashes between Ukrainian troops and separatist armed forces have continued in eastern Ukraine, with over 10,000 people reported to have died since April 2014. Progress in respect of most of the provisions in the Minsk Protocol⁵ signed by the OSCE, Russia, and Ukraine with a view to peace has remained elusive.

5 Relations with Other Countries

(1) Relations with Asian Countries

Russia recognizes that the significance of the Asia-Pacific region is increasing within its multi-pronged foreign policy, and considers it strategically important to strengthen its status in the region from the viewpoint of socioeconomic development in Siberia and the Far East, and security. To achieve strategic stability and equal strategic partnerships, Russia places particular emphasis on developing a comprehensive partnership relationship and strategic cooperative relationship with China as a key factor in maintaining global and regional stability, and also intends to assign an important role for the privileged strategic partnership with India. Another example of the ongoing wide-ranging military cooperation between Russia and India is the joint exercise “INDRA,” which has been taking place since 2003 with the involvement of the armies and navies of both countries, with their air forces also taking part in recent years.

It is a recent trend that foreign military forces participate in Russia’s large-scale military exercises, namely, with participation from China and Mongolia in 2018, India and Pakistan in 2019, and Myanmar for the first time in 2020.

Regarding the relationship with Japan, Russia states that it will develop mutually beneficial cooperation and is intensifying its approach in many fields including politics, economy and security.

(2) Relations with European Countries

Through the framework of the NATO-Russia Council (NRC), Russia has worked with NATO as an equal partner in the areas of common interest, such as by participating in certain decision-making processes. However, following the Ukrainian crisis in 2014, NATO and European countries suspended their practical cooperation with Russia, including that in the military domain, except for the NRC’s ambassador-level meetings.

In May 2020, U.S. and U.K. Naval ships entered the Barents Sea, which is adjacent to Russian Northern Fleet’s nuclear powered submarine base. The Northern Fleet sent a guided missile cruiser to track those ships. It was reported to be the first time since the end of the Cold War that NATO ships entered the Barents Sea. In November 2020, President Putin at a meeting with senior Ministry of Defence officials and defence industry executives mentioned that NATO’s military presence near the Russian boarder had been expanding, and criticized the increase in military activities by NATO members during the COVID-19 pandemic.

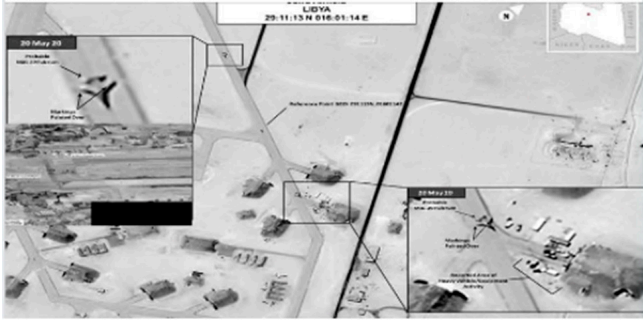
(3) Relations with Middle Eastern and African Countries

Since September 2015, while acquiring Tartus Naval Base and Khmeimim Air Base as bases of its operations in Syria, the Russian military, which was carrying out military operations to support the Assad administration in Syria, has conducted aerial bombing using fighter-bombers and long-range bombers as well as cruise missiles from surface vessels and submarines deployed to the Caspian Sea and Mediterranean. In December 2016, a nationwide ceasefire agreement brokered by Russia and Turkey took effect between the Assad administration and opposition forces. While Russia has continued to fight Syrian opposition forces since January 2017, it has been increasing its presence in the Middle East by promoting initiatives that aim for political resolutions in the future.

Russia continues to maintain a presence in Syria, with the Russian Ministry of Defence announcing in November 2019 that it had deployed helicopter units at Qamishli airport in northeastern Syria, as well as at its Khmeimim Air Base.

Additionally, operations in Syria using cruise missiles and strategic bombers have provided the ideal setting to demonstrate Russia’s long-range precision strike capabilities. Considering the significant influence of

⁵ The Minsk Protocol of September 2014 consists of the following items: (1) ensure the immediate bilateral cessation of the use of weapons; (2) ensure monitoring and verification by the Organization for Security and Co-operation in Europe (OSCE) of the regime of non-use of weapons; (3) enact the Law of Ukraine “With respect to the temporary status of local self-government in certain areas of the Donetsk and the Luhansk regions” (Law on Special Status); (4) ensure monitoring on the Ukrainian-Russian state border and verification by the OSCE, together with the creation of a security area in the border regions of Ukraine and the Russian Federation; (5) immediately release all hostages and unlawfully detained persons; (6) prohibit the prosecution and punishment of persons in connection with the events that took place in certain areas of Donetsk and Luhansk regions; (7) conduct an inclusive national dialogue; (8) adopt measures aimed at improving the humanitarian situation in Donbas; (9) ensure the holding of early local elections in Donetsk and Luhansk regions; (10) remove unlawful military formations, military hardware, as well as militants and mercenaries from the territory of Ukraine; (11) adopt a program for the economic revival of Donbas and the recovery of economic activity in the region; and (12) provide personal security guarantees for the participants of the consultations.



In May 2020, AFRICOM announced that over 14 military aircraft with their insignia removed were delivered from Russia to Al Jufra Air Base in Libya [U.S. Africa Command]

Russia's military intervention on the course of the Assad administration, coupled with the expanding partnerships between Russia and surrounding countries such as Turkey and Iran, Russia's influence on future stability in Syria and on the political settlement process cannot be ignored.

While supporting opposing sides in the Syrian conflict, Russia and Turkey coordinate their interests to avoid direct confrontation. In January 2020, the foreign and defense ministers of the two countries held a meeting in Moscow to discuss the Libyan situation. During this meeting, representatives of the Libyan Government of National Accord (GNA) led by Prime Minister Fayez al-Sarraj and its opposition, the Libyan National Army (LNA), attended peace talks. Russia is thus increasing its influence over both the Syrian situation and peace in Libya, while at the same time coordinating its interests with Turkey. Furthermore, in May 2020, the United States Africa Command (AFRICOM) announced that Russian MiG-29 fighters were delivered to Libya after military aircraft insignia had been removed in Syria, and accused of Russia's involvement in creating the war situation in Libya using private military companies (PMC) that the Russian government supports. AFRICOM also mentioned the possibility of extremely serious security concern arising in southern European countries, if Russia establishes a base on the coast of Libya and develops permanent A2/AD capabilities in the area. It has also been reported that approximately 1,200 mercenaries from

Russian private military company the Wagner Group were dispatched and on duty in Libya.

In October 2019, Russia held the first Russia-Africa Summit in Sochi and also dispatched two Tu-160 strategic bombers to South Africa under a military cooperation agreement that it had signed with South Africa in 1995. In December 2020, the Russian government announced an agreement with the government of Sudan to set up a naval base on the Red Sea in Sudan, northeastern Africa. According to the published agreement documents, the land lease period for the naval base is 25 years, Sudanese airspace can be used, and weapons, ammunition and equipment necessary to conduct missions on ships can be carried in through the port in Sudan. Securing naval bases in Sudan, in addition to Tartus in Syria, will enhance the AFRF's deployment capabilities further afield.

6 Arms Exports

Russia actively promotes the export of arms not only to maintain the infrastructure of its military industry and to make economic profit, but also to help promote better foreign policy. Export control is exclusively conducted by the Rosoboronexport State Corporation. In addition, Russia is working to improve the efficiency of its production system by promoting the integration of aircraft companies such as Sukhoi, MiG, and Tupolev. Currently, Russia has the second largest share of arms exports in the world after the United States,⁶ exporting fighters, vessels and surface-to-air missiles to countries including Asia, Africa, and Middle East. In recent years, Russia has been aggressively marketing its arms to allies and partners of the United States, including Turkey and Saudi Arabia, in addition to traditional export destinations. In particular, the export of S-400 to Turkey, a member country of NATO, has met with strong opposition from the United States. Russia is also expanding its sales activities to Southeast Asian countries such as Indonesia, Vietnam, Malaysia, and Myanmar.

⁶ According to the SIPRI, Russia has the second largest share of arms exports in the world (21%) after the United States.

Section 6

Oceania

1 Australia

1 General Situation

Australia maintains a special strategic partnership with Japan and shares universal values, such as strategic interests, respect for freedom and human rights, democracy, and the rule of law. Japan's relationship with Australia is becoming more important than ever before.

In July 1, 2020, the Australian Government updated its defense strategy and announced a policy that would prioritize the Indo-Pacific region.

2 Defense Strategies

In July 2020, the Government of Australia released the "2020 Defence Strategic Update," which updated the Australian defense strategies, and the "2020 Force Structure Plan," which detailed the Australian Defence Force's (ADF's) capability investment plan for promoting the former.

These policies are the results of reassessing the country's defense strategies since 2019 in response to the deterioration of Australia's strategic environment, which occurred more rapidly than anticipated at the time when the 2016 Defence White Paper¹ was released.

The background of the reassessment is pointed out as a strong sense of vigilance against China, but the Government of Australia has noted that it was not carried out with any single nation in mind.

As the changes in its strategic environment, the Australian Government mentioned military modernization in the Indo-Pacific and intensifying major power competition involving the United States, China and other countries. Due to long-range missiles and cyber attacks, the time required for hostile forces to launch full-scale attacks has been reduced, meaning that Australia can no longer rely on a timely warning ahead of conflict occurring. It is also stated that the conduct of 'gray-zone' activities, which aim at achieving strategic goals within the scope of not provoking conflict, have also expanded in the Indo-Pacific. For example, "using para-military forces, militarisation of disputed features, exploiting influence, interference operations, and coercive use of trade and economic levers" are listed.

Based on the understanding of these situations, the

Australian Government announced a defense policy that would focus on the region ranging from the north-eastern Indian Ocean, through maritime and mainland of South East Asia, to Papua New Guinea and the South West Pacific.

The Australian defense strategies' objectives are to deploy military power: (1) to shape Australia's strategic environment, (2) to deter actions against the country's interest, and (3) to respond with credible military force when required.

In order to achieve these objectives, the Australian Government intends to invest approximately AUS\$270 billion over the coming decade until 2030 in upgraded defense capabilities of the Australian Forces.

Currently, Australia has approximately 57,000 personnel, and high-performance tanks, vessels, and aircraft to implement joint operations with the U.S. Forces, one of its allies. For the deployment of these equipment in distant regions, Australia also owns air refueling aircraft and amphibious assault ships.

Australia is also in the process of newly acquiring 72 F-35A fighter aircraft, 12 attack-class submarines, and other equipment. The Australian defense budget in FY2020 was AUS\$42.6 billion, and it is expected to achieve the increase target of 2% of GDP.

The investment of AUS\$270 billion announced in the 2020 Defence Strategic Update includes investments in acquiring land, maritime and air equipment, information, cyber and space-related capabilities, and new longer-range combat capabilities. The new longer-range combat capabilities are positioned to be used for deterring or dealing with an invasion in the Indo-Pacific.


Australia plans to purchase the U.S.-made AGM-158c Long Range Anti-Ship Missile (LRASM) with a firing range over 370 km. Furthermore, acquisition of the army's long-range rocket artillery and missile systems, and the development of high-speed long-range strike capabilities including hypersonic weapons have also been announced.

The Australian Government also aims to acquire missile defense capabilities to protect the units deployed overseas from missiles.

¹ Australia's Defence White Papers have been released seven times in total, in 1976, 1987, 1994, 2000, 2009, 2013, and 2016.

3 Relations with Other Countries

In the 2020 Defence Strategic Update, the Australian Government states that it will continue deepening its alliance with the United States and strengthening cooperation with other partners including Japan.

 See Part III, Chapter 3, Section 1-2-1 (Australia), p. 352

(1) Relations with the United States

The Australia-U.S. alliance was formalized through the Security Treaty between Australia, New Zealand and the United States of America (ANZUS).² In the 2020 Defence Strategic Update, acknowledging that the alliance with the United States, including intelligence sharing and defense industrial and technological cooperation, is critical, the Australian Government clearly states the policy of continuing to deepen the alliance.

Since 1985, the two countries have been regularly convening the Australia-United States Ministerial Consultations (AUSMIN) to discuss major diplomatic and security issues.

In the Joint Statement of the AUSMIN held in Washington in July 2020, the two countries reaffirmed that the Indo-Pacific would be “the focus of the Alliance,” and that they will work side-by-side with ASEAN, India, Japan, and other partners to maintain a region that is secure, prosperous, inclusive, and rules-based. And the two countries expressed “serious concerns” over coercive and destabilizing actions across the Indo-Pacific. They affirmed that China’s maritime claims are not valid under international law in line with the 2016 decision of the Arbitral Tribunal and emphasized that all claims in the South China Sea must be made and resolved in accordance with international law.

The military forces of the United States and Australia are striving to improve interoperability through bilateral exercises.

Exercise Talisman sabre is the Australian-U.S. bilateral military exercise conducted biennially since 2005, with the objective of enhancing combat readiness and interoperability. The 2019 exercise was the biggest to date, with more than 34,000 personnel participating from not only the United States and Australia, but also Canada, New Zealand, and the United Kingdom, as well as the SDF. It included amphibious operations and ground combat training.

In 2020, the Australian and U.S. Navies carried out joint exercises in the South China Sea.

The United States and Australia have increased the presence of the U.S. Forces in northern Australia near

the Indo-Pacific. Based on the Force Posture Initiatives announced in November 2011, the U.S. Marines began rotational deployment in northern Australia in 2012 and have gradually expanded the scale since, which resulted in approximately 2,500 Marines deployed in the region in 2019.³ It is also reported that U.S. Air Force B-52 strategic bombers and F-22 fighters have been deployed to Australia as needed to participate in training. In addition, Australia is in the process of formulating and implementing plans to enhance facilities, airfields, and training grounds at bases used by the U.S. Forces, including Darwin and Tindal.

(2) Relations with China

For Australia, China is the biggest trade partner, and the two countries have conducted various exchanges in the defense area such as dialogues between the defense authorities, joint exercises, and mutual visiting of vessels, in addition to exchanges and cooperation in the political and economic areas.

Meanwhile, Australia has been showing its wariness toward China by, among other ways, making Australia’s position on China very clear.

The Australian Government expressed strong concerns over China’s recent land reclamation and construction activity in the South China Sea, and called on all claimant states to halt militarization, while also clearly expressing its intention to continue to exercise its rights to free navigation and flight. Furthermore, the 2017 Foreign Policy White Paper contained statements to the effect that China is challenging the position of the United States in the Indo-Pacific, the most important region for Australia.

People within and outside Australia expressed their concerns over the acquisition by Chinese businesses of Australian facilities, including Port Darwin, a port that has been used by the Australian and United States fleets among others. In January 2017, the federal Government of Australia announced the establishment of the Critical Infrastructure Centre to serve as a dedicated body that will identify facilities requiring surveillance and carefully manage the risks for advising related institutions in order to block the sale of important infrastructure related to national security, including specific ports and harbor facilities, to companies from other countries. The Centre manages the risks arising from foreign involvement by assessing the risks of sabotage, espionage and coercion in Australia’s critical infrastructure sectors, including telecommunications, electricity, gas, water and ports.

With China’s perceived influence on Australia growing larger, including cases of political figures

² A trilateral security treaty among Australia, New Zealand, and the United States, which went into effect in 1952. Since 1986, the United States has suspended its obligation to defend New Zealand due to its adoption of a non-nuclear policy. The treaty is thus effective only between Australia and the United States and between Australia and New Zealand.

³ In 2020, it was announced that the scale would be reduced to approximately 1,200 personnel due to the COVID-19 pandemic.

and parties receiving huge political contributions and bribes, the Australian Parliament passed a bill to prevent interference in domestic affairs by foreign actors. The Australian Government announced that an Australian company would receive government support and accept an underwater telecommunication cable network project that was to be partially conducted by the Chinese telecommunication company Huawei. Moreover, in August 2018, Huawei revealed that the company and ZTE were banned from bidding in an Australian 5G (advanced telecommunication system) network project by the Australian Government.

With regard to the COVID-19 pandemic, the Australian Government has raised the demand for an independent investigation into the origin of how COVID-19 infections had spread from China to the world to cause the pandemic. With this as a starting point, China is said to be applying pressure in Australia by placing restrictions on importing Australian goods such as coal, meat, barley, and wine, and also calling for cancelling travels to and study abroad programs in Australia. In addition, it is suggested that the recent large scale cyber attacks on the Australian Government and critical infrastructure in the country were conducted by China. There have also been incidents that people related to Australian media were banned from leaving the country, or detained or arrested by the Chinese authority. It is also pointed out that the conflict between China and Australia is worsening in relation to the human rights issue in Hong Kong and Uighurs.

(3) Relations with India

Australia sees India as a key security partner.

At the Australia-India summit meeting (held online) in June 2020, the two countries agreed to upgrade their relationship to be a Comprehensive Strategic Partnership. The two leaders announced that both countries share the vision of “an open, free, rules-based Indo-Pacific region,” and released the “Joint Declaration on a Shared Vision for Maritime Cooperation in the Indo-Pacific.” At the summit meeting, other than cooperation in the economic field, in the area of national defense, Australia and India concluded the military acquisition and cross-servicing agreement between them, and agreed to strengthen the interoperability of the forces through military exercises based on the above agreement. In addition, the two countries also signed an agreement to further promote defense science technology cooperation.

In November 2020, the Royal Australian Navy participated in the Multilateral Exercise “Malabar,” which had been carried out by the U.S. Navy, Indian Navy, and the Japan Maritime Self-Defense Force (JMSDF).

 See Section 8-1-2 (Military Affairs), p. 147

(4) Relations with Southeast Asia and Pacific Island Countries


In the 2020 Defence Strategic Update, Australia announced the policy framework that the country’s defense planning would focus on the region ranging from the north-eastern Indian Ocean, through maritime and mainland South East Asia to Papua New Guinea and the South West Pacific.

Australia has been deepening its relations with Indonesia in the security and defense fields following the signing of the Lombok Treaty — a security cooperation framework concerning cooperation in a wide range of defense fields — in November 2006, the elevation of their relationship to a strategic partnership in March 2010, and the September 2012 conclusion of the Defence Cooperation Arrangement, which included the enhancement of cooperation in the fields of anti-terrorism measures and maritime security. The two countries’ cooperative relations in the security and defense fields have stalled intermittently. However, since mutual visits by ministers and higher-level officials resumed in the second half of 2015, the bilateral relationship has been improving through many initiatives, including regular Foreign and Defense Ministerial Meetings (2+2) and the signing of an agreement on maritime security and terrorism, and of a Maritime Cooperation Plan of Action in 2018.

With Singapore and Malaysia, Australia carries out regular joint combined exercises in the South China Sea and other areas under the Five Power Defence Arrangements (FPDA; entered into force in 1971) framework, whereby Australia, New Zealand, and the United Kingdom would consult each other in the event or threat of an armed attack on Singapore or Malaysia, to decide on their response. Australia considers that Singapore is its most advanced defense partner, and that they share Australia’s interest in a secure maritime trading environment. Defense cooperation is also deepening, including the signing of a memorandum of understanding concerning military training and training area development in Australia under the comprehensive strategic partnership in October 2016. Regarding Malaysia, Australia stations the ADF in Royal Malaysian Air Force (RMAF) Base Butterworth, and contributes to maintaining regional security and stability through patrol activities in the South China Sea and the northern Indian Ocean.

Australia plays a leading role in assisting Pacific Island countries and Timor-Leste in fields such as security maintenance, coping with natural disasters, and maritime patrol. In particular, in the field of maritime patrol, Australia still regularly deploys ADF assets to the South Pacific to assist with patrol activities. It also

plans to supply the Pacific Island countries and Timor-Leste with 21 new Guardian-class patrol boats by 2023. In November 2018, Australia announced its largest ever financial package of up to AUS\$3 billion for infrastructure development in Pacific Island countries, with the intent of further strengthening relations. In May 2019, immediately after forming his Cabinet following the general election, Prime Minister Scott Morrison expressed his intention to continue active engagement with the Pacific Island countries, called “Pacific Step-up.” He made his first official trip overseas after the cabinet forming to Solomon Islands in June 2019, showing his stance of placing importance on the Pacific Island countries.

 See 2 of this Section (New Zealand), p. 137
Section 7 (Southeast Asia), p. 139

(5) Overseas Activities

Since Australia finished part of the missions in the Middle East, it has been moving to conduct activities focusing on the Indo-Pacific as indicated in the 2020 Defence Strategic Update.

Australian activities in Iraq, such as advising and assisting, as well as providing capacity building assistance to the Iraqi Security Forces on the military front, were

completed in June 2020.

Australia had been deploying one E-7A airborne early warning and control aircraft and one KC-30A aerial refueling aircraft to the Middle East to provide support for anti-terrorism operations conducted by the United States and other countries, but announced the completion of these activities in September 2020.

In addition, Australia announced the plan to reduce the Royal Australian Navy’s activities in the Middle East for the reasons to prioritize the deployment of resources in the Asia-Pacific region. Activities at the International Maritime Security Construct (IMSC), which was established under the U.S.-led Maritime Security Initiative, were completed in December 2020.

Meanwhile, in addition to the ADF’s policy of focussing on training and maritime surveillance in the Indian Ocean, the South China Sea, and around Pacific Island countries, since 2018, ADF has also made contributions to the peace and stability of the international community by conducting patrolling and monitoring activities using ADF patrol aircraft and vessels against illegal maritime activities, including illicit ship-to-ship transfers by North Korean ships, which is prohibited under the UN Security Council resolution.

2 New Zealand

In July 2018, New Zealand announced a defense policy, the Strategic Defence Policy Statement 2018. This document refers to major changes in the strategic environment since the publication of the previous Defence White Paper in 2016, including intensifying competition among powers, climate change, and cyber and space.

The Statement then presented New Zealand’s security objectives, specifically, ensuring public safety, preserving sovereignty and territorial integrity, protecting lines of communication, etc., strengthening international order, sustaining economic prosperity, maintaining democratic institutions and national values, and protecting the natural environment. In order to achieve these objectives, New Zealand prioritizes the securing of operational capabilities in the primary operation area that stretches from the South Pole to the Equator. The country believes that challenges to the existing order of the Asia-Pacific region could impact its security and prosperity and that it is important to have defense capabilities that can globally support the maintenance of the international rule-based order. The Statement also mentioned other priorities, including capabilities to operate effectively with the United States, the United Kingdom, Australia, and Canada, and the maintenance of the scale and quality

of New Zealand’s military contributions.

Moreover, the Statement was the first document that mentioned the impact of climate change and the role of the New Zealand Defence Force (NZDF) regarding this issue, which reflects the new administration’s Pacific Reset strategy, which makes a commitment to support the Pacific Island countries that have been exposed to disasters. As for the issues in the South China Sea, New Zealand had refrained from referring to China by name in order to maintain its neutral position in this matter. However, in the Statement, the country made a comment on China’s militarization in the South China Sea, stating, “China’s more confident assertion of its interests has at times raised tensions with neighboring states and with the United States.”

As for diplomatic relations, New Zealand has maintained close relationships with the United States and Australia based on the ANZUS Treaty. In particular, New Zealand sees Australia as its closest partner. The United States has suspended its defense obligation to New Zealand since 1985, when New Zealand refused the entrance of a U.S. ship following New Zealand’s ban on nuclear weapons. Nevertheless, the two countries have strengthened their relationship in the diplomacy and

defense fields through the Wellington Declaration (2010), which primarily focuses on strengthening strategic relations in the fields of foreign policy and military affairs, and the Washington Declaration (2012), which mainly deals with expanding defense cooperation. New Zealand has thus established the United States as a very close strategic partner. While New Zealand has deepened its relationship with China through such initiatives as cooperation for the “Belt and Road” Initiative and joint air exercises, it also looks at China with a cautious eye as shown in the Strategic Defence Policy Statement 2018.

The NZDF has 9,400 personnel.⁴ It has contributed to the peace and stability of the region through such activities as engaging in monitoring and surveillance activities by patrol aircraft against illegal maritime

activities, including illicit ship-to-ship transfers involving North Korean-flagged vessels prohibited under the UN Security Council resolution, and dispatching its personnel to the United Nations Command Military Armistice Commission (UNCMAC) in the ROK, and to other operations in the Middle East and the South Pacific.

In June 2019, the New Zealand Government published the “Defence Capability Plan 2019,” which sets out planned investments of NZ\$20 billion until 2030. Investments under the Plan are: strengthening of the relationship with the Pacific Island countries; response to the climate crisis; and acquisition of vessels, helicopters, transport aircraft and others to strengthen the maritime surveillance capability.

⁴ According to “The Military Balance 2021”

Section 7

Southeast Asia

1 General Situation

Southeast Asia occupies a strategic position for traffic, linking the Pacific and the Indian Oceans, such as the Straits of Malacca and the South China Sea. It is an important region for Japan, which relies on maritime transport for many of the supplies needed for economic activities and the lives of the Japanese people.

Meanwhile, this region still has destabilizing factors, including the territorial disputes over the South China Sea, ethnic minority issues, separatist and independence movements, and Islamic extremist groups. Moreover, there are incidents, such as piracy, by which the safe passage of ships is obstructed. In order to cope with these issues, the countries in Southeast Asia are working to build military forces for national defense and maintenance of domestic public security, as well as for addressing new security issues such as terrorism and piracy. They are also pursuing cooperation with such countries as the

United States, China, Russia, Australia, and India to this end. Recently, against the backdrop of economic development, the countries have been modernizing their military forces, mainly their naval and air forces, as well as strengthening their maritime law enforcement capacities.

The impact of COVID-19 has been significant across Southeast Asia. Countries in the region have taken measures to contain the spread of the virus such as border closures, city lockdowns and domestic movement restrictions. However, the COVID-19 outbreak has seriously affected the economy of the countries in the region, which also had an impact on the military front. For example, Southeast Asian countries have decided to cut defense budgets and cancel or postpone joint military exercises to raise costs for implementing COVID-19 countermeasures.

2 Security and Defense Policies of Each Country

1 Indonesia

Indonesia is a country of importance in Southeast Asia, with the world's largest Muslim population. At the same time, as it is the largest archipelago country in the world, it has vast land and territorial waters and strategic importance for maritime traffic.

As part of its military force reform, Indonesia aims to meet the requirements for minimum defense capabilities — what it calls “Minimum Essential Force (MEF).” However, Indonesia has indicated that its maritime defense capabilities, in particular, are still very much inadequate. Accordingly, Indonesia has announced a defense budget increase as well as a policy to bolster its deployment of assets to the Natuna Islands, in the South China Sea, and other locations. In December 2018, it was reported that Indonesia deployed an army composite battalion, Indonesian National Air Defense Forces Command's radar squadron, and Indonesian Marines composite battalion on the Natuna Islands for an opening ceremony of a military base with piers that can also accommodate submarines, and hangars for unmanned vehicles. The Indonesian military established three Combined Defence Area Commands (Pangkogabwilhan), in

September 2019. Kogabwilhan is a representation of the concept of Indonesian Military's interoperability, which is currently a priority policy for Indonesian Military. Kogabwilhan serves as an initial action in the event of a conflict in its area for military operations and non-military operations and as a deterrent force in the event of external threats. In July 2020, the Kogabwilhan conducted exercises in waters around the South China Sea.

Concerned about the “nine-dash line” claimed by China, which overlaps with Indonesia's EEZ in the vicinity of the Natuna Islands, Indonesia has enhanced its patrol activities in the area. In December 2019, Indonesia's Ministry of Foreign Affairs issued a note of protest on the grounds that a China Coast Guard vessel had been found to have operated illegally in Indonesia's EEZ around the Natuna Islands by escorting their fishing fleet.

Indonesia emphasizes cooperation with other Southeast Asian countries, and adopts a free and active foreign policy.

With the United States, it is strengthening its cooperative relationship in such fields as military education and training and military equipment procurement, and is carrying out joint training, including

“Cooperation Afloat Readiness and Training (CARAT)”¹ and the “Southeast Asia Cooperation Against Terrorism (SEACAT)”² exercises. In September 2020, Indonesia and the United States carried out a joint table top exercise Gema Bhakti 2020 via video teleconference, and in October of the same year, Indonesian Minister of Defense Prabowo Subianto visited the United States to have a meeting with U.S. Secretary of Defense Mark Thomas Esper.

2 Malaysia

Malaysia’s first defense white paper, which was published in December 2019, highlights the country’s geography as a nation with two territories—Peninsular Malaysia, and Sabah and Sarawak, on the island of Borneo—located between the vast Pacific and Indian Oceans. The document identifies Malaysia’s potential to serve as a bridging linchpin between the two oceans, and also demonstrates an awareness of the fact that, while Malaysia’s strategic location and natural resources are a blessing, they also pose a challenge. Given these attributes, Malaysia has historically been affected by the political dynamics of major powers. Even today, Malaysia sees in its defense white paper that uncertain big power relations, which refers to the U.S.-China, is the most important strategic factor for Malaysia. Moreover, the white paper also demonstrates an awareness that Malaysia faces increasing non-traditional security threats such as terrorism, cyberthreats, piracy, and natural disasters.

Based on this recognition, Malaysia’s defense policy aims to defend national interests in each of three concentric areas of interest, consisting of the Core Area, which includes both the country’s land masses and its territorial waters; the Extended Area, which encompasses the surrounding waters and airspace; and the Forward Area, which incorporates locations beyond the extended area where Malaysia’s national interests are affected. The policy consists of three key pillars: (1) “Concentric Deterrence,” which aims to deter all forms of external intrusion or conflicts by enhancing the capability of the nation’s armed forces; (2) “Comprehensive Defense,” which seeks to build resilience as a nation throughout society, including among the people; and (3) “Credible Partnerships,” which focuses on the promotion of regional stability via the expansion and enhancement of defense cooperation with other countries as a highly credible partner.

In connection with the recent continued anchoring of

Chinese vessels around South Luconia Shoal, over which Malaysia claims sovereignty, Malaysia has announced that its Navy and maritime law enforcement agencies would conduct around-the-clock monitoring, and that Malaysia would defend its sovereignty. Along with this strengthening of its maritime defense force, Malaysia also has striven to bolster its defense posture in eastern Malaysia, constructing a new naval base in April 2017 in Bintulu, close to James Shoal and South Luconia Shoal. In July 2019, the Air Force carried out live-fire missile exercises in Sabah state, on Borneo in eastern Malaysia.

Malaysia and the United States hold joint exercises such as CARAT and SEACAT, and promote military cooperation including capacity-building in the maritime security field.

The Mahathir administration formed in May 2018 has been pushing forward reconsiderations of large-scale infrastructure projects as a part of fiscal reconsolidation efforts. Prime Minister Mahathir Mohamad informed China that Malaysia would cancel or postpone the long-distance railway project that started in August 2017 with China’s cooperation. However, in April 2019, the two countries agreed to resume the long-distance railway project after making cost reductions, and the Malaysian and Chinese companies involved signed a supplementary agreement.

In February 2020, the Malaysian king appointed Muhyiddin Yassin as the country’s next prime minister, after receiving a letter of resignation from Prime Minister Mahathir. Muhyiddin was sworn in as prime minister that March.

Since December 2019, Malaysia has been confirming Chinese ships’ activities around its own drillship West Capella, while in April 2020, the Chinese government survey ship “Haiyang Dizhi 8” was also observed near the West Capella. In the same month, the United States and Australia carried out joint exercises in the area surrounding the West Capella, and in May 2020, U.S. Littoral Combat Ship (LCS) also conducted presence operations near the West Capella.

As well as conducting joint exercises with the United States such as “CARAT” and “SEACAT,” Malaysia has been promoting military cooperation including capacity building in the maritime security field.

3 Myanmar

Myanmar shares borders with China and India and is a gateway to the Indian Ocean for China and some ASEAN countries. In light of these factors, Myanmar is noted for

¹ A general term that refers to a series of bilateral exercises that the United States conducts with Bangladesh, Brunei, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Timor-Leste.

² A general term that refers to counter-terrorism joint exercises that the United States conducts with Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

its strategic significance. In Myanmar, the armed forces had control over the government following the collapse of the socialist regime in 1988. However, with an economic slowdown caused by the economic sanctions imposed by the West, transition to civilian rule based on the road map to democracy was completed.

Including the release of political prisoners and ceasefire agreements with ethnic minorities, the Government of Myanmar has actively taken steps toward democratization. The international community has shown some level of appreciation for these steps, with the West, including the United States, easing economic sanctions on Myanmar.

However, following an August 2017 attack on a police station by Arakan Rohingya Salvation Army (ARSA), forces including Myanmar's military launched mop-up operations in Rakhine state and more than 600,000 refugees — primarily Muslims — fleeing to the neighboring country, Bangladesh, in two months. Western countries denounced Myanmar for the purported massacre and human rights violation.

In November 2020, Myanmar's parliamentary election was held for the first time in five years and the ruling National League for Democracy (NLD) party secured seats that greatly exceeded the required half in both the upper and lower houses to win a single-party majority. However, in February 2021, State Counsellor Aung San Suu Kyi and her party's senior members were detained by Myanmar's military, which was claiming election fraud. The acting President with a military connection declared a state of emergency to carry out a coup d'état, and power was handed over to the commander-in-chief. In addition to the UN Secretary-General, who condemned the coup, more condemnation and deep concerns have been expressed by many countries, calling for the immediate release of detained government senior officials and returning to a democratic process.

In terms of foreign policy, the Government of Myanmar has upheld a policy of neutrality and non-alignment, while for its national defense policy, continued to emphasize the three national causes of Non-disintegration of the Union, Non-disintegration of National Solidarity, and Perpetuation of Sovereignty, as well as resolutely repelling foreign invasions and interference in domestic matters. While no specific policies of the post-coup administration have been released, it has set a goal to continue implementing the principle of peaceful coexistence by maintaining independent and active non-aligned diplomacy.

Similarly, China has maintained a good relationship with Myanmar since the two countries established diplomatic relations in 1950 and is regarded as a major supplier of equipment. Myanmar has also received

Chinese aid for pipeline construction and the development of Kyaukpyu Port. In January 2020, President Xi Jinping became the first Chinese leader to visit Myanmar for 19 years and affirmed China's policy of promoting economic cooperation through the BRI.

Myanmar has maintained a cooperative relationship with Russia in the military field, including the period of the past military regime, and Russia was a destination for students from Myanmar and a supplier of major defense equipment. As for India, since the transition to civilian rule, Myanmar has deepened cooperative relations in the fields of the economy and military, which resulted in defense cooperation and exchanges such as the hosting of various seminars and friendly visits to Myanmar by Indian naval vessels.

Cooperative relations with North Korea, including weapons trades, were maintained under Myanmar's military regime in the past. Following the transition to democracy, although Myanmar denied that it had military ties to North Korea, the report issued by the Panel of Experts of the UN Security Council Sanctions Committee on North Korea in March 2018 reported that the country has received a ballistic missile system and other weapons from North Korea.

4 The Philippines

The Philippines considers that its archipelagic attributes and geographic location are a source of both strength and vulnerability. Moreover, the country sees that its strategic location and rich natural resources have also provided a strong temptation to expansionist powers. Based on this perception, although resolving internal armed conflicts remains its top security concern, rising tensions in the South China Sea have prompted the Philippines to give the same attention to territorial defense as it does to internal security threats.

The Philippines, with a historically close relationship with the United States, has maintained a cooperative relationship with the United States under their mutual defense treaty and military assistance agreement, even after the withdrawal of the U.S. Forces in 1992. The two countries conduct a number of bilateral exercises, including Balikatan, KAMANDAG, and Maritime Training Activity Sama Sama. In March 2016, the two countries agreed on five locations for carrying out defense cooperation under the Enhanced Defense Cooperation Agreement (EDCA) they signed in April 2014 for strengthening cooperation in such areas as the capacity enhancement of the Armed Forces of the Philippines and disaster relief: Antonio Bautista Air Base, Basa Air Base, Fort Magsaysay, Lumbia Air Base, and Mactan-Benito Ebuen Air Base. During his visit to the Philippines in

March 2019, U.S. Secretary of State Mike Pompeo made it clear that the South China Sea is part of the Pacific Ocean and thus any armed attack on Philippine forces, aircraft, or vessels in the South China Sea would trigger mutual defense obligations under the Mutual Defense Treaty. In September 2019, the United States and the Philippines held the Mutual Defense Board and Security Engagement Board (MDB-SEB), at which they reaffirmed the importance of their defense cooperation. Meanwhile, the Government of the Philippines notified in January 2020 its intention to terminate the Visiting Forces Agreement (VFA), which prescribed the legal status of U.S. military personnel when U.S. Forces undertook joint military exercises or other activities in the Philippines. However, in June 2020, the Philippines notified the United States of suspending the termination procedures for six months and of further six-month suspension again in November. Attention will be paid to further action by the two countries.

The Philippines and China have competing claims over the sovereignty of the Spratly Islands and Scarborough Shoal in the South China Sea. Seeking a settlement under international law, in January 2013, the Philippines launched arbitral tribunal proceedings pursuant to UNCLOS against China. In July 2016, a final award was rendered, accepting nearly all of the Philippines' submissions. The Government of the Philippines released a statement that it welcomed the award by the arbitral tribunal and strongly affirms its respect for the decision. Also, President Duterte stated in his State of the Nation Address held in the same month that the Philippines would strongly affirm and uphold the award handed down for the arbitration case between the Philippines and China. In September 2019, the Office of the President of the Philippines revealed that China had vowed to adopt a 60-40 sharing scheme favoring the Philippines in the proposed joint development of resources in the South China Sea in exchange for setting aside the arbitral court ruling. The Office of the President of the Philippines, however, made it clear that it would not abandon the ruling.

In April 2019, the Philippines criticized China when it confirmed the presence of more than 200 Chinese vessels near and around Thitu Island (Filipino name: Pag-asa Island), which is occupied by the Philippines. In June, in response to a claim that the Chinese aircraft carrier "Liaoning" and other ships had passed through the Sibutu Strait, Secretary of National Defense Lorenzana said that it was not innocent passage.

The conflicts between the Philippines and China over

the South China Sea dispute were observed even in 2020 during which the COVID-19 infections became a global pandemic. The Philippines protested against China that a Chinese military vessel had directed fire-control radar at a Philippine Navy ship in February 2020, and that China had established administrative districts on islands in the South China Sea in April of the same year. In July 2020, responding to China's announcement of its plan to conduct military training in the South China Sea, Secretary of Foreign Affairs. Teodoro Locsin expressed his concerns in a video. Moreover, regarding the fact that "220 Chinese militia ships were confirmed in the South China Sea" in March 2021, the Department of National Defense of the Philippines accused China of conducting "a clear provocation of the militarization" of the South China Sea, and asked for withdrawal. In response, the Chinese side claimed its sovereignty over Whitsun Reef, and then denied the existence of Chinese militia ships and explained that "some fishing ships had to evacuate Whitsun Reef due to the bad weather."

The Philippines calls for a peaceful resolution of the conflict based on the United Nations Convention on the Law of the Sea and other international laws. In September 2020, during the UN General Assembly, President Duterte remarked, "The Award (in the Arbitration between China and the Philippines) is now part of international law... We firmly reject attempts to undermine it."

 Chapter 3, Section 5-1 (Trends Related to the "Principle of the Freedom of the High Seas"), p. 189

5 Singapore

Given its limited land area, population, and resources, Singapore's existence and development depend on the peace and stability of the region in a globalized economy. Singapore gives high priority to national defense, with defense spending accounting for about one-fifth of its national budget.

Singapore identifies deterrence and diplomacy as twin pillars of its national defense policy. Because it is a very small country, Singapore's armed forces make use of the training facilities of other countries, including the United States and Australia, while continually dispatching military personnel to take part in training exercises overseas.

Singapore emphasizes the importance of cooperative relations with ASEAN and the FPDA,³ and has concluded defense cooperation agreements with countries within and outside the region. With the aim of contributing to peace and stability in the region, Singapore supports U.S. presence in the Asia-Pacific and permits it to use

³ Entered into force in 1971. This agreement states that Australia, New Zealand, and the United Kingdom will discuss what response should be adopted in the event of aggression towards or the threat of an attack on Malaysia or Singapore. The five countries carry out various exercises based on these arrangements.

military facilities in Singapore. Since 2013, U.S. littoral combat ships (LCSs) began their rotational deployments. In December 2015, the P-8 patrol aircraft of the U.S. Forces were deployed to Singapore for around one week for the first time. The two countries have committed to continuing to carry out similar deployments routinely. In addition, Singapore conducts joint exercises with the United States, such as CARAT and SEACAT. In September 2019, the two countries signed the Protocol of Amendment to the 1990 Memorandum of Understanding Regarding United States Use of Facilities in Singapore.

Singapore has strong economic ties with China. Both countries also conduct joint naval exercises. In October 2019, the two countries signed the enhanced Agreement on Defence Exchanges and Security Cooperation (ADESC). On the other hand, diplomatic relations with China have been strained partly due to Singapore's belief in following the arbitration award when it comes to the resolution of the South China Sea disputes and partly due to Singapore's defense relationship with Taiwan.

Singapore concluded the Bilateral Agreement for Navy Cooperation with India in November 2017 and the two countries undertake Exercise Bold Kurukshetra, a bilateral armor exercise, and the Singapore India Maritime Bilateral Exercise (SIMBEX). In addition, Singapore, India, and Thailand held their first trilateral joint exercise in September 2019, which took place near the Andaman Islands.

In March 2020, Singapore and Australia signed the Treaty on Military Training and Training Area Development in Australia. This treaty enables the Singapore Armed Forces to access Australia's newly developed training area. On the other hand, in May 2020, the Ministry of Defense of Singapore announced that it would cancel all the overseas exercises including the country's largest-scale overseas exercise "Exercise Wallaby" in response to the COVID-19 pandemic.

 See Section 6-1-3 (4) (Relations with Southeast Asia and Pacific Island Countries), p. 136

6 Thailand

Thailand's defense policy includes: strengthening defense cooperation through ASEAN, international organizations, and other entities; defense that makes comprehensive use of political, economic, and other national strengths; and effective defense aimed at increasing the readiness of the Royal Thai Armed Forces (RTAF) and developing the defense industry.

Under its flexible omni-directional diplomatic policy, Thailand pursues cooperation with other Southeast Asian countries and coordination with major countries. Exercise Cobra Gold, which is co-sponsored by the U.S.



Opening ceremony of the Exercise Cobra Gold [United States Indo-Pacific Command]

and Thailand and has been implemented since 1982, is currently one of the largest multilateral exercises in Southeast Asia.

After the coup in May 2014, the United States scaled down the size of U.S. forces participating in Exercise Cobra Gold. However, this was restored under the Trump Administration and was carried out even in 2020 despite the COVID-19 pandemic. In addition, the Marine Corps of the two countries have continued their bilateral naval training CARAT and counter-piracy and trafficking exercise SEACAT, and the Royal Thai Army participated in the U.S. Army's Exercise Lightning Forge conducted in Hawaii in July 2020.

Thailand and China have conducted joint exercises such as Blue Strike among their marines and Falcon Strike among their air forces. It has been pointed out that Thailand's military relationship with China has become closer after the freezing of U.S. military assistance following the coup.

In September 2019, Thailand and the ROK signed the General Security of Military Information Agreement (GSOMIA).

7 Vietnam

Based on its viewpoint that the sea is closely associated with the national construction and defense, Vietnam has established the objective of becoming a strong marine country, particularly prioritizing the modernization of its military forces and law enforcement forces at sea as well as ensuring the capability to properly handle sea situations, maritime independence, sovereignty, sovereign rights, jurisdiction and national interests at sea.

Vietnam deploys its omni-directional diplomatic policy and intends to actively participate in international and regional cooperation in order to build friendly relations with every nation. In March 2016, Vietnam opened an international port in the Cam Ranh Bay, a

strategic location, and Navy vessels from many countries including Japan have called at the international Cam Ranh Bay port.

Vietnam and the United States have strengthened their military relations in recent years. This has taken such forms as joint exercises with the U.S. Navy and port calls by U.S. Navy vessels in Vietnam. In 2017, mutual visits were conducted by the leaders of both countries, and an agreement was reached on the deepening of defense cooperation. March 2018 marked the first port call by a U.S. aircraft carrier to Vietnam since the end of the Vietnam war. In addition, the U.S. aircraft carrier and cruiser made a call at Da Nang in March 2020.

Vietnam and Russia continue to strengthen cooperation in the area of national defense, with Vietnam dependent on Russia for the majority of its defense equipment. In April 2018, the two countries signed a military and technical cooperation roadmap, while in July 2019, a Vietnamese naval vessel visited the port of Vladivostok for the first time. In December 2019, a submarine rescue vessel from Russia's Pacific Fleet visited the port of Cam Ranh and participated in the first bilateral joint submarine rescue exercise.

 See Section 5-5-5 (1) (Relations with Asian Countries), p. 132

Vietnam and China, under their comprehensive strategic cooperation partnership relations, proactively conduct exchanges among their senior government officials. However, the two countries have competing claims concerning issues such as sovereignty over the South China Sea. In summit meetings and many other occasions, the two countries have agreed to process the

differences in their opinions on maritime issues and to refrain from activities that would complicate matters. However, they have disputes regarding resources development and the operation of fishing boats. The defense white paper published in November 2019 demonstrates an awareness that Vietnam and China need to be settled with precaution, avoiding negative impacts on general peace, friendship, and cooperation for development between the two countries. As such, it recognizes that the two countries should continue negotiations and consultations to find peaceful solutions on the basis of international law.

Vietnam and India have been deepening their cooperative relationship in a broad range of areas, including security and economy. In the area of defense cooperation, it is noted that the Indian Armed Forces support the training of Vietnam's Navy submarine personnel and Air Force pilots, and Indian Navy vessels make friendly visits to Vietnam. In September 2016, Prime Minister Modi became the first Indian prime minister to visit Vietnam in 15 years. During the visit an agreement was reached on raising the status of the bilateral relationship to a comprehensive strategic partnership, while an announcement was made concerning a loan of US\$500 million for deepening defense cooperation. In November 2020, Vietnam and India held a defense ministerial video teleconference, and the two countries agreed to further promote defense cooperation.

 See Chapter 3, Section 5-1 (Trends Related to the "Principle of the Freedom of the High Seas"), p. 189

3 Military Modernization in the Region

In recent years, Southeast Asian countries have increased their defense spending against the backdrop of economic development and other reasons, and are modernizing their military forces, focusing on inducting equipment such as submarines and fighters, including fourth-generation modern fighters. On the other hand, the countries that prioritize the implementation of COVID-19 countermeasures have announced defense budget cuts and postponements of equipment procurement, indicating the impact on military modernization.

In February 2018, Indonesia concluded an agreement to purchase an additional 11 Su-35 fighters from Russia. With the ROK, Indonesia concluded an agreement to purchase three ROK-made 209-class submarines, the third of which was reportedly produced in Indonesia and completed diving trials in January 2020. In January 2016, the two countries also concluded a detailed agreement on cost sharing and bilateral cooperation

in the joint development of the 4.5 generation KF-X/IF-X fighter. Indonesia plans to receive 14 ScanEagle UAVs from the United States by March 2022. As well as showcasing Chinese CH-4 UAVs at an October 2019 celebration for Indonesian National Armed Forces Day, in December 2019 Indonesia unveiled the prototype Black Eagle UAV, a domestically produced unmanned aerial vehicle that has incorporated several aspects of China's CH-4 UAV. In April 2020, the Indonesian Government announced a reduction of approximately 9 trillion rupiah (approximately 63.8 billion yen) in the FY2020 defense spending from the initial budget in order to secure the budget for COVID-19 countermeasures.

Malaysia announced a plan to build six indigenous LCSs. The first of these vessels was launched in August 2017. Furthermore, in November 2016, Malaysia concluded an agreement with China to purchase four littoral mission ships (LMSs). In June 2019, Malaysia

announced that it was to receive 12 ScanEagle UAVs from the United States by March 2022.

In December 2019, Myanmar received a Kilo-class submarine, named Minye Theinkhathu, from India. The procurement of the country's first submarine is attracting attention from neighboring countries.

The Philippines has taken steps in recent years to modernize its defense equipment against the backdrop of conflicts over territorial rights in the South China Sea.

In terms of air force capabilities, between November 2015 and May 2017, the Philippines successively introduced 12 FA-50PH light fighters purchased from the ROK. It is currently planning to initiate a multi-role fighter program. In addition, the Philippines received six A-29 light attack aircraft from Brazil as successors of aging OV-10 light attack aircraft in October 2020, and also held a delivery ceremony of eight US ScanEagle unmanned aerial vehicles in November 2020.

As for naval forces, the Philippines received three Hamilton-class frigates from the United States by 2016. The Philippines introduced two Indonesian-made landing dock vessels by 2017. In October 2016, the Philippines concluded an agreement to purchase two frigates from the ROK. The August 2019 commissioning of a Pohang-class corvette received from the ROK marked the restoration of the antisubmarine capability that the Philippines had long lacked. That September, the Philippines conducted the DAGIT-PA multi-service military exercise involving the army, navy, and air force, during which the four AAV-7 assault amphibious vehicles that it had commissioned the previous June were operated. In July 2020, the Philippines conducted a commission ceremony of the frigate "Jose Rizal," which was the first frigate with missile attack capabilities, procured from the ROK.

Singapore is actively striving to modernize its forces. Today, it is one of the largest arms importers in the world.

It introduced 24 U.S.-made F-15 fighters by 2012 and also participates in the F-35 JSF Program. In January 2020, the U.S. Government officially approved the sale of F-35B fighter jets to Singapore and delivered the required certification notifying Congress of the sale.

As for Thailand, in July 2014, the country established the Submarine Squadron Headquarters. In April 2017, the Royal Thai Navy drew up a plan to purchase three Yuan-class submarines from China over the next 11 years, and the Thai Cabinet approved the purchase of one vessel. However, in April 2020, Thailand announced that it would postpone the procurement of two Yuan-class submarines from China in order to secure the budget for COVID-19 countermeasures. In addition, the Cabinet approved in September 2012 a plan to introduce two frigates. The first frigate was received from the ROK in December 2018. In September 2019, Thailand signed an agreement to purchase a Type 071 landing platform dock from China. In addition, by 2013, Thailand had introduced 12 Swedish-made JAS-39 Gripen fighters. In September 2019, it received the first 10 of 60 Stryker armored vehicles purchased from the United States.

By January 2017, Vietnam successively introduced six Russian-made Kilo-class submarines. By February 2018, Vietnam started the operation of four Russian-made Gepard-class frigates. As for its air force capabilities, Vietnam started to successively introduce Russian-made Su-30 fighters in 2004, and to date, the total number of delivered Su-30 fighters came to 36. In January 2020, it was reported that Vietnam had ordered 12 Yak-130 training aircraft from Russia. It is also due to receive six ScanEagle UAVs from the United States by March 2022.

4 Intra-and Extra-Regional Cooperation

ASEAN member states utilize ASEAN as the multilateral security framework of the region. ASEAN holds mechanisms such as the ARF and ASEAN Defense Ministerial Meeting (ADMM), which provide opportunities for dialogue on security issues. Furthermore, ASEAN has made efforts to improve the security environment in the region and promote mutual trust, for example, by holding the ASEAN Militaries' Humanitarian Assistance and Disaster Relief Table-Top Exercise (AHR). In addition, ASEAN attaches importance to expanding its relations with countries outside of the region. It holds the ADMM-Plus, a platform that adds eight non-ASEAN countries including Japan to ADMM, under which humanitarian assistance and disaster relief (HA/DR) exercises have been conducted. ASEAN and

the United States held their first ASEAN-U.S. Maritime Exercise (AUMX) in September 2019. With China, ASEAN held the first naval table-top exercise in August 2018, and the first naval field training exercise in October 2018. In relation to this, it was reported that China requested during the meeting for the formulation of Code of the Conduct of Parties in the South China Sea (COC) to include a clause on regular implementation of China-ASEAN joint military exercises and a clause stating that no military exercises shall be held jointly with countries from outside the region, unless the parties concerned are notified beforehand and express no objection.

At the June 2019 ASEAN Summit, ASEAN announced the ASEAN Outlook on the Indo-Pacific (AOIP), which is based on such principles as ASEAN centrality, openness,

and transparency amid dynamism in the Asia-Pacific and Indian Ocean regions, and expresses the intention to promote peace, stability, and prosperity in the Indo-Pacific region. In April 2020, the Special ASEAN Plus Three (Japan-China-ROK) Summit on Coronavirus Disease 2019 (COVID-19) was held in a video teleconference format, and countermeasures against the COVID-19 pandemic were also discussed at the ASEAN Summit and the ADMM held later.



Special ASEAN Plus Three (Japan-China-ROK) Summit on Coronavirus Disease 2019 (COVID-19) [ASEAN]

Section 8

South Asia

1 India

1 General Situation

With a population of more than 1.3 billion on its vast land, India is the world's largest democratic country. It has achieved steady economic growth in recent years, and has significant influence in the South Asian region. Also, it is located in the middle of the Indian Ocean, which is of strategic and geopolitical importance in terms of sea lines of communication, connecting the Asia-Pacific region with the Middle East and Europe. With the permeation of the concept of "Indo-Pacific" in the international community, India has increased its presence as a geopolitical player, while the international community in return has increasingly high expectations for the country's role.

On the diplomatic front, the second Modi administration that was inaugurated in May 2019 has maintained the neighborhood first policy, which emphasizes strengthening relations with South Asian countries, while expanding the focus of strengthening India's external relations to the Asia-Pacific region, in accordance with the "Act East" policy. In addition, the administration has carried out proactive foreign policy, placing priority also on India's relations with the United States, Russia, and Europe, among other areas. In the defense domain too, the administration has attached importance to ensuring maritime security, especially in the Indian Ocean, and deepened collaboration with other countries. As well as attaching importance to the Indian Ocean, on which India depends for its trade, the Indian Maritime Security Strategy published in October 2015 defines the nation's primary areas of maritime interest as an extensive marine area centered on India, encompassing the Persian Gulf, the Red Sea, and the Strait of Malacca. In addition, the strategy states that India will become a "net security provider" in the maritime neighborhood.

India established a geographical theatre command, the Andaman and Nicobar Command, as a tri-service integrated theatre command in October 2001, and the Strategic Forces Command, which is a functional organization responsible for managing and administering nuclear weapons, in January 2003. Furthermore, in December 2020, India's new plan for establishing the Maritime Theatre Command (MTC) was also reported. The MTC will be the geographical theatre command

that subsumes the Western Naval Command, the Eastern Naval Command, the Andaman and Nicobar Command, and the Southern Air Command.

India has non-demarcated border issues with China and Pakistan. There are also concerns about the activities of ultra-leftists and secession and independence movements, as well as the movements of Islamic extremists stationed across the India-Pakistan border. Accordingly, defending its land borders and tackling the threat of domestic terrorism remain major concerns for India.

2 Military Affairs

As a part of the efforts to modernize its naval and air forces, India is expanding procurement of equipment from foreign countries as well as joint development with them, and has emerged as the world's second-largest arms importer.¹ Furthermore, under the "Make in India" initiative, the administration is promoting expansion of foreign companies' direct investment in India's defense industry and the domestic production of equipment through enhancing technological cooperation with other countries.

With respect to its naval capabilities, India operates the Russian-built conventional powered aircraft carrier INS "Vikramaditya," and is also building one indigenous conventional powered aircraft carrier INS "Vikrant" with aid from France and Italy. With regard to submarines, India acquired one Russian-built Akula-class nuclear-powered attack submarine INS under a lease arrangement. It also reportedly placed into service its first indigenous ballistic missile and nuclear submarine INS "Arihant," which was built with support from Russia, in August 2016. In January 2020, India test-fired a K-4 submarine-launched ballistic missile from an underwater platform.

In addition, India is making progress with the indigenous production of six conventional submarines in collaboration with France.

With respect to its air force capabilities, India signed an agreement to purchase 36 Rafale fighter aircraft from France in September 2016 as part of India's plan to introduce medium multi-role combat aircraft (MMRCA). It was reported that the first five aircraft arrived in India in July 2020. Based on a transfer of technology agreement with Russia, a total of 222 Su-30MKI fighter aircraft have been manufactured by an Indian state-owned company

¹ According to the statistics from 2015 to 2019 in SIPRI YEARBOOK 2020

under license since 2001, and reportedly, this company completed the manufacturing of the last two aircraft in February 2021.

See Fig. I-2-8-1 (Military Forces of India and Pakistan [approximate])

Based on the nuclear doctrine of 2003, India adheres to the following policies: credible minimum deterrence, the no-first-use nuclear policy, no use against non-nuclear weapon nations, and maintaining the unilateral moratorium on nuclear tests that it announced immediately after the nuclear test in 1998. India promotes the development and deployment of various ballistic missiles. As well as conducting the test launches of “Agni 5” in December 2018 and “Agni 2” in November 2019, India has reportedly started developing “Agni 6,” which is believed to have a range of up to 10,000 km. It is deemed that the country aspires to extend the ranges of ballistic missiles and make other performance improvements. In regard to cruise missiles, India has deployed the supersonic cruise missile “BrahMos” jointly developed with Russia and is also developing the hypersonic cruise missile “BrahMos II” and a ballistic missile defense system.²

3 Relations with Other Countries

(1) Relations with the United States

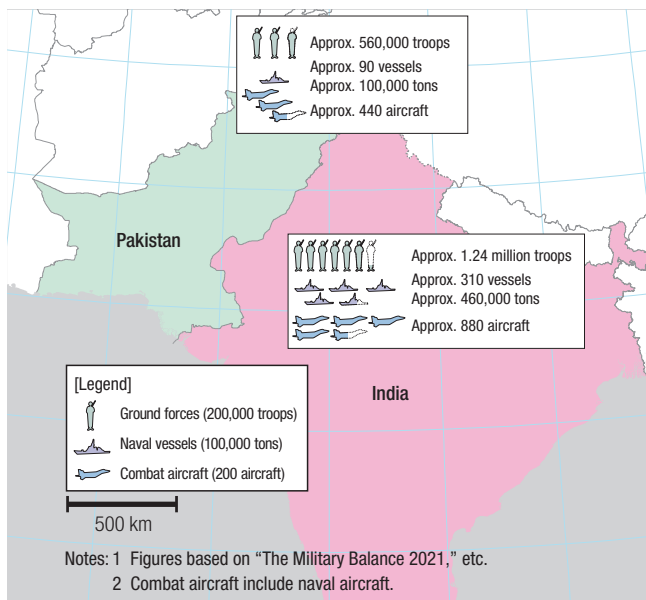
India is actively striving to strengthen bilateral relations with the United States. The two countries conduct the exercises, such as Malabar³ with Japan, on a regular basis. In addition, in recent years, the United States has become one of India’s major equipment procurement destinations.⁴

When Prime Minister Modi visited the United States in June 2016, the United States recognized that India is a “Major Defense Partner.” In August 2016, in a joint statement of the U.S. and Indian defense ministers, the United States agreed to elevate defense trade and technology sharing with India to a level commensurate with its closest allies and partners. Also, a memorandum was signed concerning logistics support cooperation.

In June 2017, Prime Minister Modi visited the United States. At his first summit meeting with President Trump, the two sides agreed to continue to strengthen their strategic partnership. In September 2018, the first U.S.-India “2+2” Meeting was held. In this meeting, the two countries signed the Communications Compatibility and Security Agreement (COMCASA), which aims to promote access to advanced defense systems and ensure the optimal use of a U.S.-made platform owned by India. In November 2019, the two countries held their first tri-service exercise “Tiger Triumph,” followed by the third U.S.-India “2+2” Meeting in October 2020 in which the Basic Exchange and Cooperation Agreement (BECA) was concluded.

Fig. I-2-8-1

Military Forces of India and Pakistan (approximate)



U.S.-India “2+2” Meeting [U.S. DoD]

- 2 Reports specify these missiles as follows. Agni 5: a mobile, three-stage solid-fueled ballistic missile with a range of about 5,000-8,000 km. Agni 6: a three-stage solid/liquid-fueled ballistic missile with a range of about 8,000-10,000 km. BrahMos: a solid/Ramjet supersonic cruise missile with a range of about 300-500 km. Also, India is reportedly developing a ballistic missile defense system. According to reports, it is a two-stage intercept system consisting of a missile for high altitude interception (PAD) up to 80 km in altitude and a missile for low altitude interception (AAD) up to 30 km in altitude.
- 3 Malabar was initially a bilateral maritime exercise between the United States and India, while Japan has participated in this exercise since 2007. From 2017 to 2019, Malabar was conducted as a trilateral exercise among Japan, the United States and India. In November 2020, Malabar was conducted as a quadrilateral exercise by involving Australia.
- 4 According to the statistics from 2015 to 2019 in SIPRI YEARBOOK 2020

(2) Relations with China

 Section 2-3-4 (3) (Relations with South Asian Countries), p. 85

(3) Relations with Russia

 Section 5-5-5 (1) (Relations with Asian Countries), p. 132

(4) Relations with South Asian and Southeast Asia Countries

In the “Transformational Diplomacy” published in June 2015, India clearly set out the neighborhood first policy, aimed at strengthening relations with other South Asian countries. Based on this policy, India agreed in November 2019 to provide Sri Lanka with US\$4.5 billion in aid to fund anti-terrorism measures, and agreed in December 2018 to provide the Maldives with US\$4.7 billion in support for economic development. In the case

of Bangladesh, India agreed in April 2017 to provide US\$4.5 billion to support economic development and also concluded a memorandum of understanding on defense cooperation, which included US\$500 million in defense-related aid.

Based on its Act East policy, India continues to engage with Southeast Asian nations and other countries in the Asia-Pacific region on a bilateral, regional, and multilateral basis, promoting economic and cultural relations, as well as pursuing the development of strategic relationships. Leveraging its experience of using Russian equipment, India provides Vietnam, Malaysia, and other users of such equipment with support for capacity building. In September 2019, India, Singapore, and Thailand held their first trilateral maritime exercise.

2 Pakistan**1 General Situation**

Wedged between the powerful South Asian nation of India and politically-unstable Afghanistan, and sharing borders with China and Iran, Pakistan is placed in a geopolitically significant and complex position. In particular, Islamic extremists conduct activities across the Pakistan-Afghanistan border, and Pakistan’s attitude towards the war against terrorism draws much attention from the international community.

While supporting the United States’ war against terrorism in Afghanistan, the Government of Pakistan has been struggling as its domestic security situation has worsened, with issues such as growing anti-U.S. sentiment and retaliatory terrorism by Islamic extremists. Although the Pakistan Armed Forces’ reinforced operation to crackdown on militant groups has reportedly drastically decreased terrorism, terrorist attacks have continued to occur sporadically.

Against such a backdrop, the Pakistani Government has continued its counter-terrorism operation, “Radd-ul-Fasaad,” since 2017, while also working on the construction of fences and guarding stations along the border with Afghanistan to prevent the entrance of extremist groups.

2 Military Affairs

Pakistan takes the position that maintaining nuclear deterrence against the nuclear threat posed by India is

essential to ensure national security and self-defense. It is believed to have begun nuclear development in the 1970s and conducted its first nuclear test in 1998.

Pakistan has been actively proceeding with the development of ballistic missiles and cruise missiles capable of carrying nuclear warheads, and has conducted a number of test launches in recent years. In 2015, Pakistan conducted two test launches of the ballistic missile “Shaheen 3” in March and December, and a test launch from an aircraft of the cruise missile “Raad” in January 2016. Pakistan also conducted its first test launch of the ballistic missile “Ababeel,” which is capable of delivering multiple warheads, using Multiple Independently-Targetable Re-entry Vehicle (MIRV) technology, in January 2017. Like it did in the previous year, it conducted another test fire of the submarine launched cruise missile “Babur” in March 2018. Pakistan is thought to be steadily increasing the capabilities of its missiles, firing the “Shaheen 1” ballistic missile in November 2019, following India’s launch of a ballistic missile.⁵

Pakistan jointly developed the Al-Khalid tank and the JF-17 fighter aircraft with China. It is currently using the 85 indigenously produced JF-17 Block I and Block II aircraft, and has begun manufacture of the JF-17 Block III. Pakistan is reportedly also planning to purchase from China eight submarines, which Pakistan is positioning as the “backbone of the Navy.” Four will be built in China, with the remainder to be built in Pakistan.

⁵ Reports specify these missiles as follows. Shaheen 3 (Hatf 6): a mobile, two-stage solid-fueled ballistic missile with a range of about 2,750 km. Ababeel: a new ballistic missile with a range of about 2,200 km. Raad (Hatf 8): a cruise missile with a range of about 350 km. Babur (Hatf 7): a supersonic cruise missile with a range of about 750 km.

3 Relations with Other Countries

(1) Relations with the United States

Besides supporting the activities of the U.S. Forces in Afghanistan, Pakistan cooperates with the war on terror by launching mop-up operations against Islamic extremists in the Pakistan-Afghanistan border area.

Meanwhile, Pakistan urges the United States to immediately end its drone attacks on Islamic extremists in Pakistani territory, and the Pakistani Government has protested repeatedly.

The United States, on the other hand, has condemned Pakistan for allowing Islamic extremists in Afghanistan to take haven, which poses a threat to the United States. In August 2017, President Trump stated, “No partnership can survive a country’s harboring of militants and terrorists who target U.S. Service members.” In the same month, the United States announced the suspension of US\$205 million in Foreign Military Assistance to Pakistan, which was provided by the Department of State (DOS). Following this, it also announced the suspension of DOS’ security assistance to Pakistan in January 2018 and the suspension of US\$300 million of the Coalition Support Funds in September 2018.

Amid ongoing tense relations between the two countries, Prime Minister Imran Khan visited the United States in July 2019 and held his first summit meeting with President Trump. During these talks, they exchanged views on anti-terrorism measures and peace in Afghanistan, as well as discussed ways of restoring the two countries’ relationship. Just before Prime Minister Khan’s visit to the United States, Pakistan sought to highlight its anti-terrorism efforts to the United States by arresting Hafiz Saeed, a co-founder of the Pakistan-based Islamist extremist group Lashkar-e-Taiba, on whom the U.S. Government had placed a bounty for being a ringleader of the 2008 Mumbai attacks. After the talks, Prime Minister Khan disclosed his feeling that the two countries had gained a deeper understanding of each other, stressing that “Pakistan will do everything possible to ensure that this [Afghan] peace process goes forward.” With the desire for an improvement in relations evident in such developments, the response by both countries will be the focus of attention.

(2) Relations with China

 See Section 2-3-4 (3) (Relations with South Asian Countries), p. 85

3 Disputes over the Sovereignty of Kashmir

India and Pakistan have disputes over the sovereignty of Kashmir,⁶ and have had three armed conflicts of significant scope. The territorial dispute over Kashmir has long been in contention between India and Pakistan,

with dialogues repeatedly resuming and suspending due to frequent cross-border attacks along the Line of Control (LOC).

⁶ India asserts the accession of Kashmir to India, based on the Instrument of Accession document by which the ruler of Kashmir acceded to India at the time of Pakistan’s independence, and contends that this matter should be resolved through bilateral negotiations on the basis of the 1972 Simla Agreement (an agreement on the peaceful resolution of disputes and the withdrawal of their military forces that was reached following a summit meeting held in Simla in northern India). On the other hand, Pakistan declares that this should be decided through a referendum, in line with a 1948 UN resolution. The two countries have taken a significantly different fundamental stance towards the resolution of the dispute.

The China-Indian border, generally considered to be about 3,500 km long, is comparable to the length of the Japanese Archipelago, about 3,300 km, from the northernmost island (Etorofu Island) to the westernmost island (Yonaguni Island). Most parts of the border exist in the Himalayas, a high-altitude mountain range that includes Mount Everest, Earth's highest mountain.

The Himalayas historically served as a buffer zone to prevent large-scale conflicts between China and India. The situation however changed in the 1950s when China incorporated Tibet as its autonomous region and directly shared the Himalayan border with India. As the China-Indian border has not been demarcated, deadly clashes occurred intermittently between Chinese and Indian militaries in the border region, deteriorating the bilateral relationship. The 1962 armed conflict, in particular, was a large-scale battle. Clashes between the two militaries occurred sporadically even after the 1962 armed conflict, and military tensions continue to simmer.

In this context, in 1993, pending an ultimate solution to the boundary question, the two governments entered into the first agreement on the maintenance of peace and tranquility along the Line of Actual Control (hereinafter, "the LAC Agreement"), with the aim of preventing large-scale military conflicts. The LAC serves as a temporary boundary between the two powers. There are several LAC Agreements, and they mainly stipulate the prohibition of the use of military capabilities against the other side, avoidance of holding large-scale military exercises in close proximity of the LAC, establishment of the joint working group on the boundary question and consultation mechanisms in case of contingencies arising in the area along the LAC. Since the LAC Agreements prohibit the use of military capabilities in the boundary region, no bullets of guns and howitzers have been fired since the 1990s. Even when contingencies happen, the two sides promptly deal with them through consultation mechanisms under the LAC Agreements, which contributes to prevention of making a situation worse.

Skirmishes in May 2020 occurred under such a background. Chinese and Indian soldiers faced off against each other and exchanged physical blows on the LAC near the Indian-administrated states of Sikkim and Ladakh, raising tensions once again. Among them, on June 15 of the same year, the

clash that occurred at Galwan Valley along the state of Ladakh was particularly severe. Indian officials said that 20 Indian soldiers were killed in the clash. The incident also reportedly injured at least 76 other Indian soldiers. The Chinese Ministry of National Defense announced in February 2021 that there were four fatalities on the Chinese side. The foreign ministers of both countries accused each other of the violation of the agreements, but the truth of the case is not clear.

After the Galwan clash, China and India have regularly held commander-level meetings following the LAC Agreements, confirming the early and complete disengagement of troops and gradual de-escalation. However, the standoff between the two countries along the LAC continues since then, and clashes in Sikkim in January 2021 show that tensions are not completely eased.

China and India are regional powers and their bilateral relationship has the potential to have a significant impact on the security environment in the Indo-Pacific region. Attention will be paid to further action by the two countries moving forward.

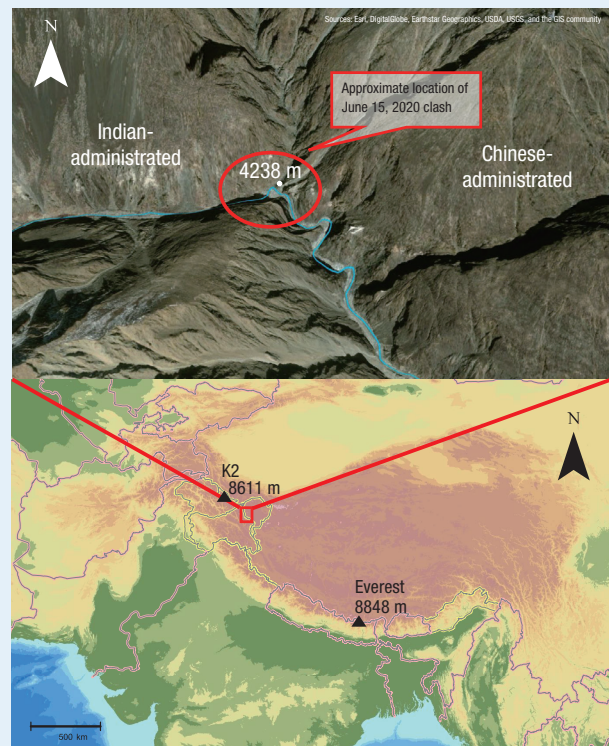


Figure: Line of Actual Control (LAC) between China and India

Section 9 Europe and Canada

1 General Situation

With the end of the Cold War, many European countries now recognize the need to address diverse security challenges, such as outbreaks of regional conflicts within and around Europe, the rise of terrorism, the proliferation of WMDs, and the growing seriousness of cyber threats. At the same time, these countries had recognized that the threat of large-scale invasion by other countries had disappeared. Nevertheless, since the heightening of tensions in Ukraine in February 2014, there is a growing need to revisit existing strategies and plan new concepts in order to deal with Russia’s unilateral attempts to change the status quo with force in the background and “hybrid warfare.” With regard to international terrorism, the incidents of terrorism occurring within European nations have made counterterrorism efforts an urgent task. In

addition, border security problems remain a challenge, including those regarding refugees and migrants that have rapidly increased due to Middle East turmoil such as the prolonged civil war in Syria.

To respond to such challenges and situations, Europe has sought to further strengthen and expand multilateral frameworks, such as NATO and the EU. At the same time, it is working to contribute to the security and stability of the international community by proactively participating in activities outside the European region. Moreover, steps are taken at the national level by reviewing security and defense strategies, reforming national defense systems, and strengthening bilateral and multilateral defense and security cooperation.

 Fig. I-2-9-1 (Expansion Situation of NATO/EU Member States)

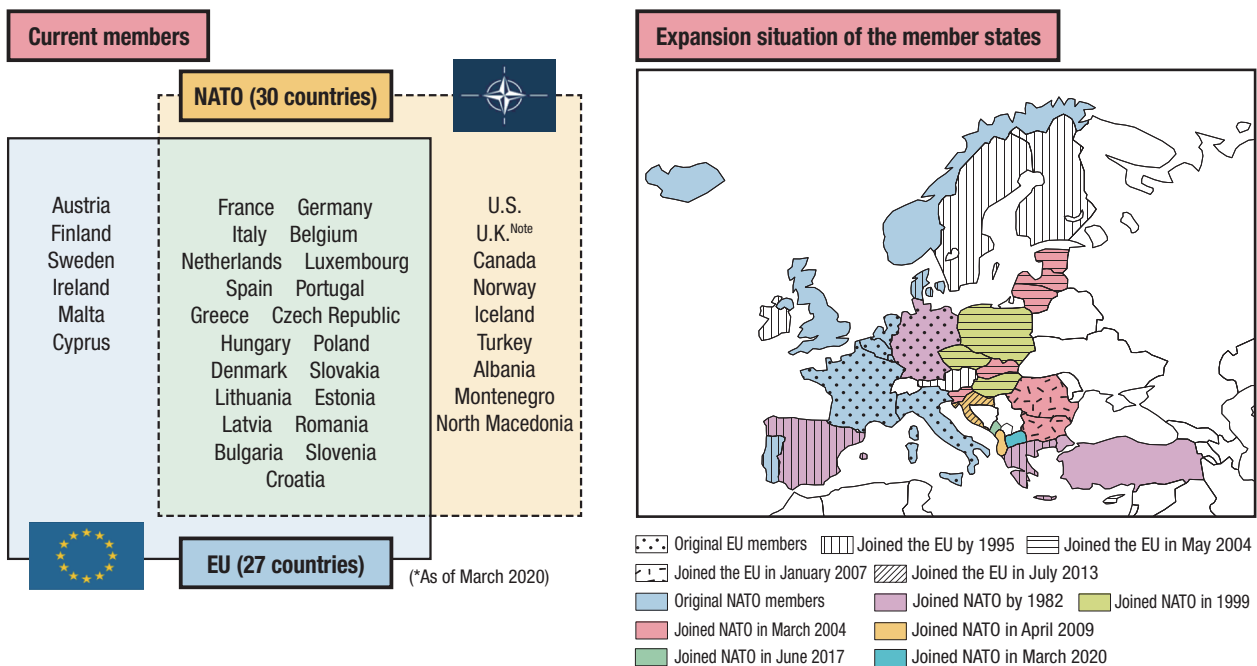
2 Enhancement of Multinational Security Frameworks

1 NATO

Founded for the core task of collective defense among member states, NATO has expanded the scope of its activities to conflict prevention and crisis management since the end of the Cold War.

In the NATO Summit in November 2010, NATO adopted a new Strategic Concept for the first time in 11 years and prescribes three core tasks as follows: (1) collective defense in accordance with Article 5 of the Washington Treaty; (2) crisis management including conflict prevention and post-conflict stabilization

Fig. I-2-9-1 Expansion Situation of NATO/EU Member States



Note: The United Kingdom left the EU on January 31, 2020.

and reconstruction assistance; and (3) cooperative security including active contribution to arms control, disarmament, and non-proliferation. In June 2020, NATO announced the launch of the NATO 2030 initiative, which aims to strengthen NATO's functions. In this initiative, policies for more political use of NATO are considered in order to address all of the major challenges faced by NATO, such as the rise of China, cyber attacks, disruptive technology, climate change, and Russia's active military activities.

In light of changes in the security environment, and the expanding gap of defense expenditure between the United States and other member states, NATO member states in 2014 agreed on the goal to allocate 2% or more of their GDP to defense spending by 2024. The London Declaration was adopted at NATO's 70th anniversary summit in December 2019. The participating leaders reaffirmed therein their solemn commitment to collective defense as enshrined in Article 5 of the Washington Treaty and stated that they will increase defense expenditure further.

At the same summit, the rise of China was discussed for the first time, and the London Declaration stated the understanding that China's growing influence and international policies would present both opportunities and challenges, which needed to be addressed together as an alliance. In his June 2020 remarks on the NATO 2030 initiative, NATO Secretary General Jens Stoltenberg mentioned that NATO would "need to work even more closely with like-minded countries. Like Australia, Japan, New Zealand, and South Korea" to deal with China coming closer to NATO's domain (the Arctic, cyberspace, etc.). Representatives from Asian countries in partnership with NATO also participated in the NATO Foreign Ministers' Meeting in December 2020 and discussed cooperation for addressing the rise of China.

Following Russia's development of "hybrid warfare" as well as the frequent "unusual flights" of Russian Armed Force aircraft over northern and eastern Europe, including the Baltic states, NATO and member states have recognized the threat posed by Russia and are working to bolster deterrence. At the NATO Summit in September 2014, leaders adopted a joint declaration demanding Russia to retract its "annexation" of Crimea and adopted the Readiness Action Plan (RAP) for enhancing existing readiness forces.¹ Based on this plan, NATO has continued to maintain its presence in eastern allies, while steps have been taken to significantly improve the readiness of the existing multinational NATO Response Force (NRF) and create the Very High Readiness Joint Task Force

(VJTF) that can be mobilized within two to three days. Furthermore, at the NATO Summit in July 2016, members decided to deploy four multinational battle groups to the three Baltic nations and Poland on a rotational basis. These became fully operational in 2017. At the NATO Summit in July 2018, members decided to put in place a readiness initiative called the "Four Thirties," to maintain a situation in which, by 2020, 30 mechanized battalions, 30 air squadrons, and 30 combat vessels can be ready to be used within 30 days or less. They also decided on reforms of the command headquarters, establishing the Joint Force Command Norfolk in the United States with the objective of strengthening the defense of Atlantic sea lines of communications between the United States and Europe, as well as establishing the Joint Support and Enabling Command in Ulm, Germany, to expedite the transport of troops and equipment within and outside Europe. Views on Russia differ between NATO member states against the backdrop of their different geographical distances from Russia and others. While taking measures to address Russian influence, NATO members have maintained opportunities for dialogue with Russia to narrow their differences in views and increase predictability.

Alongside collective defense, NATO's core tasks include crisis management operations both within and outside the region. In the Mediterranean, a permanent maritime force has been deployed to the Aegean Sea since February 2016 due to the influx of illegal immigrants transiting the Mediterranean. This force monitors the influx of illegal immigrants and shares information with Turkey, Greece, and other countries. Also, Operation Sea Guardian, which focuses on crisis management, was launched in November 2016 and a wider array of missions including counterterrorism and capacity building assistance have been conducted.

Since January 2015, NATO has been leading the Resolute Support Mission (RSM), whose primary tasks are to provide training, advice, and assistance to the Afghan National Defense and Security Forces (ANDSF). At the NATO Summit in July 2018, NATO decided to maintain its presence in Afghanistan until seeing signs of changes in the local situation and enhance support for Afghanistan by extending financial assistance for ANDSF until 2024. It has stationed 17,000 personnel in Afghanistan.

With regard to the Islamic State of Iraq and the Levant (ISIL), NATO has dispatched early warning and control aircraft forces and implemented NATO surveillance and reconnaissance missions since October 2016. NATO

¹ The RAP was approved as one of the concrete efforts of the Connected Forces Initiative (CFI). The CFI is intended to provide a framework for conducting joint training and exercises among member states. Furthermore, it is designed to strengthen joint training among member states and with partner countries, enhance interoperability, and make use of advanced technology.

announced the commencement of the new NATO Mission Iraq (NMI) at the NATO Summit in July 2018, providing training and capacity building assistance for Iraqi security forces. At the February 2020 Meetings of NATO Ministers of Defence, participants agreed to enhance NATO's training mission in Iraq, to contribute to the stabilization of the situation in the Middle East. In addition, at the February 2021 Meetings of NATO Ministers of Defence, participants reached an agreement regarding NATO's training mission in Iraq to increase the number of participating personnel from approximately 500 to 4,000 and expand the mission locations. NATO is also carrying out missions in Kosovo and other countries.

While NATO plays a key role in advancing various initiatives, some member states are facing clear differences in their positions concerning regional issues. For example, amid many countries' calling for the suspension of foreign intervention over the Libyan Civil War including arms exports, Turkey has continued to provide military assistance to Libya, which France strongly denounced. Furthermore, in June 2020, when a French military vessel attempted to inspect a Turkey-related ship suspected of violating the Libya Arms Embargo in the eastern Mediterranean Sea, Turkish navy vessels escorting the cargo ship irradiated the French vessel, and France protested. Turkey denied the French claim as groundless, while after this incident, France announced that it would stop participating in "Operation Sea Guardian." Therefore, the issues surrounding Libya have also been affecting NATO's activities. Another regional issue concerns the eastern Mediterranean Sea in which gas exploration activities have been in progress since 2009 at a large gas field discovered offshore of Cyprus. However, Turkey considers it problematic that Greece and other countries are jointly promoting energy development without Turkey's involvement, despite the situation where the boundary including the Exclusive Economic Zone (EEZ) has not been defined between Turkey and these countries. Against this background, in August 2020, Turkey began the exploitation of resources in the disputed waters with Greece in order to protect its national interest. Responding to Turkey's move, Greece and France strengthened their military presence in the eastern Mediterranean Sea, which caused a collision between Turkey and Greece vessels. NATO, seeing the situation as a concern, embarked on the mediation of consultations to establish a mechanism that would prevent a military confrontation between Turkey and Greece. The United States also requested the countries concerned to reach a diplomatic resolution of the

situation, as the escalation of military tension would only benefit the enemy hoping for cleavage in the unity among the countries in the Atlantic region. Turkey also called for resolution through dialogue, and it was announced in January 2021 that bilateral discussions between Turkey and Greece concerning resource surveys in the East Mediterranean, which were discontinued in 2016, would be launched in Istanbul.

2 EU

The EU seeks to enhance its security initiatives under the Common Foreign and Security Policy (CFSP) and Common Security and Defence Policy (CSDP),² and in June 2016, the Global Strategy for the European Union's Foreign and Security Policy detailing the EU's fundamental approach to foreign and security policy was adopted by the European Council for the first time in approximately 10 years. This document calls for initiatives towards enhancing the EU's internal and external resilience against threats to order in Eastern Europe, and the threat of terrorism or other events in the Middle East and Africa, in accordance with the principles of rules-based order and democracy. In November 2016, the European Commission released an action plan for reinforcing defense cooperation in Europe, including the establishment of the European Defence Fund (EDF).

In December 2017, the Permanent Structured Cooperation (PESCO) was launched as a defense cooperation framework for 25 countries among the member countries. Under this framework, the participating countries finance and cooperate in joint projects including the joint development of equipment and infrastructure that will contribute to developing readiness. It is expected that the framework would strengthen the EU's defense capabilities. In this way, the EU is trying to enhance capabilities for undertaking security and its strategic independence by responding to the present and future security demand in Europe.

In response to the crisis in Ukraine, the EU has condemned the military measures of Russia and implemented economic sanctions against Russia. In addition, to support the economic and political reforms in Ukraine, the EU continues its engagement in nonmilitary affairs, including the provision of large-scale financial assistance to Ukraine.

To deal with the threat of ISIL, the EU extends funds to carry out humanitarian assistance for Syria and Iraq. Additionally, the EU works with countries in regions such as the Middle East and North Africa to provide capacity

² The EU, although it has a property of non-binding multilateral cooperation, introduced the CFSP, which covers all areas of foreign and security policy based on the Treaty of Maastricht, which took effect in 1993. In June 1999, the European Council decided to implement the European Security and Defence Policy (ESDP) to offer peacekeeping and humanitarian assistance activities in conflict areas, as a part of the CFSP framework. The Treaty of Lisbon, made effective in 2009, renamed the ESDP to CSDP and clearly positioned it as an integral part of the CFSP.

building assistance in counterterrorism measures, among other activities. In November 2015, in accordance with a request from France after the terror attacks in Paris, the EU, for the first time, activated the “mutual assistance clause” stipulating a mutual defense obligation, and EU member states provided their support to France.

Since 2003, the EU has proactively undertaken both military operations and nonmilitary missions under the CSDP.³ Operation Atalanta, the EU’s first maritime mission to combat piracy, has been under way off the coast of Somalia and in the Gulf of Aden since December 2008. Under this mission, vessels and aircraft dispatched from each country protect ships in the area and conduct surveillance in these waters. In addition, those vessels and aircraft conduct joint exercises with SDF units. Since July 2017, the scope of activities has been expanded through the assignment of new missions, including reconnaissance on illegal transactions in crude oil exported from Libya and information sharing with relevant organizations on human trafficking. Since March 2020, a maritime operation in the Mediterranean, Operation IRINI, whose primary mission is to monitor the arms embargo against Libya, has been conducted.

3 Cooperation between NATO and the EU

Advancements have been seen in cooperation between NATO and the EU in addressing unprecedented challenges efficiently. At the NATO Summit in July 2016, a joint declaration was released citing hybrid threats, cybersecurity and other fields in which NATO and the EU should prioritize cooperation. The NATO Summit in July 2018 issued a joint declaration that identified substantial progress in NATO-EU cooperation and cited the mobility of military forces, counterterrorism and other fields for further cooperation. Based on these declarations, the EU’s PESCO includes a project for developing arrangements for smooth movement of military personnel and assets inside and outside the EU and is expected to contribute to NATO’s quick military deployment in an emergency. In this way, NATO and the EU are advancing their cooperation in a manner to complement each other for the purpose of enhancing security initiatives.

3 Security/Defense Policies of European Countries and Others

1 The United Kingdom

After the end of the Cold War, the United Kingdom, perceiving that there is no direct military threat against the country, has advanced national defense reform with particular focus on improving its overseas deployment capability and readiness, in order to deal with new threats such as international terrorism and proliferation of WMDs.

In March 2021, the Johnson administration released the “Integrated Review of Security, Defence, Development, and Foreign Policy” (Integrated Review). Replacing the 2015 National Security Strategy and the Strategic Defence and Security Review (NSS/SDSR), the Integrated Review sets out a comprehensive strategy including foreign policy and development to adapt to a more competitive age under the post-Brexit foreign policy, “Global Britain.” As the trends that influence the U.K. and international order, the U.K. Government identified the following four contexts as particularly important: geopolitical shifts such as the growing importance of the Indo-Pacific; systemic competition between democratic and authoritarian values and systems; rapid technological changes; transnational challenges, such as climate change.

In the same month, the British Ministry of Defence released a Defence Command Paper Presented to Parliament, titled the “Defence in a Competitive Age,” which supplements the Integrated Review and presents details of the U.K.’s defense. The Ministry of Defence proposed in this paper to increase the defense budget, prioritize the investment in the newer domains of cyberspace and space, upgrade vessels and aircraft, and reduce the army troops to deal with various threats, while also indicated the increase in the overall nuclear warhead stockpile and the implementation of enhancing nuclear deterrent capabilities.

The United Kingdom also expressed its intention to play more active roles in maintaining the international order, while maintaining and strengthening the relationship with the United States, European countries, and NATO, as well as noting the government’s tilt to the Indo-Pacific. Specifically, the U.K. Government showed its posture to work with Indo-Pacific partners to uphold freedom of navigation and international law, such as the deployment of carrier strike groups led by the Royal Navy’s aircraft carrier HMS Queen Elizabeth in 2021, and capacity building and enhanced training with ASEAN countries. Recently, to assist in international efforts to monitor

³ These are called Petersberg tasks. They consist of: (1) humanitarian assistance and rescue missions; (2) peacekeeping missions; and (3) combat missions in crisis management, including peacemaking.



HMS "Montrose" (U.K.), which came to Japan to monitor illicit ship-to-ship transfers

illicit maritime activities, including ship-to-ship transfers with North Korean vessels, the Royal Navy frigate HMS "Argyll" conducted surveillance activities in sea areas surrounding Japan, including the East China Sea, in December 2018 and January 2019, while the frigate HMS "Montrose" did the same between late February and early March 2019. Japan and the United Kingdom have also been cooperating in the sharing of information, with the aim of enhancing the effectiveness of UN Security Council resolutions.

In the Integrated Review, the United Kingdom states the intention to deepen its engagement in the region in the decade ahead to establish a greater and more sustainable presence than any other European country. Going forward, attention will focus on the U.K.'s move in relation to its involvement in the region.

2 France

Since the end of the Cold War, France has focused on maintaining independence of its defense policies, while having led initiatives to enhance the defense structure and capability in Europe. It has worked on the development of its military capacity by streamlining and integrating military bases, dealing with operational requirements to strengthen its defense capability, as well as enhancing its intelligence capabilities and modernizing equipment required in the future.

The Defence and National Security Strategic Review announced by the Macron administration in October 2017 states that the threats that France faces, including domestic terrorism, the refugee issue, and the Ukraine crisis, are diversifying, increasing in complexity, and rapidly becoming more violent, and amidst the increasingly multipolar international system, competition is intensifying among major military powers and the danger of escalation is growing. Under these conditions, France will fulfill its duties within NATO, including for collective defense and contributing to security, and

will take a leading role in efforts to strengthen the EU's defense capabilities. In June 2018, the Military Planning Law for 2019-2025 was enacted, consisting of four pillars — human resources, equipment modernization, contributions to Europe's strategic independence, and technological innovation — to materialize the national security strategy given in the Strategic Review. The law confirms a plan to allocate a total of approximately 300 billion euros to defense by 2025 to fulfill President Macron's commitment to the goal of raising defense spending to 2% of France's GDP by 2025.

Having positioned the fight against ISIL as one of its top national defense priorities, France has been conducting airstrikes against ISIL in Iraq since September 2014 and in Syria since September 2015. The aircraft carrier "Charles de Gaulle" supported anti-ISIL operations while at sea in the eastern Mediterranean in April 2019 and was among the naval task force dispatched to the eastern Mediterranean for a month in January 2020 to provide similar operational support. Following this, France killed the leader of al Qaeda in the Sahel region in June 2020, and launched the operation of the Takuba task force, composed of European special forces, in July of the same year. In addition, France has continued to provide education and training to the Iraqi Security Forces and Peshmerga, as well as humanitarian assistance for refugees.

In January 2020, France and seven other European nations, including the Netherlands and Denmark, issued a political statement supporting the creation of the European Maritime Awareness in the Strait of Hormuz (EMASOH) surveillance mission, which has been launched in response to a series of incidents affecting the safe passage of civilian vessels in the Gulf of Oman since May 2019. Before the month was out, France dispatched a frigate to the gulf, where it has been conducting warning and surveillance operations.

Since France has territories in the Indo-Pacific region, it is the only EU member state that has continuous military presence in the region, with approximately 6,000 personnel and vessels permanently stationed. Placing importance on its commitment to the region, France points out in the Strategic Review the potential for a threat to interests, such as the freedom of navigation, due to the worsening strategic situation in the Asia-Pacific region, and clearly states that France will maintain its stance of protecting the sovereignty of its overseas territories in the Pacific Ocean and the Indian Ocean. France's Defence Strategy in the Indo-Pacific, which was published in June 2019, states that China's growing influence is shifting the balances of power in the Indo-Pacific region and highlights the importance of strengthening partnerships with the United States, Australia, India, and Japan. In

In addition, France has proactively organized the multilateral exercises Croix du Sud and Equateur in the South Pacific. In February 2018, France had the frigate “Vendémiaire” make a port call in Japan and conduct joint exercises with the Maritime Self-Defense Force (MSDF). In March 2019, a carrier strike group including the aircraft carrier “Charles de Gaulle” left France, and conducted a multilateral exercise with Australian, U.S. and Japanese ships including MSDF Destroyer JS “Izumo” in May 2019, when the group was deployed in the Indian Ocean. Furthermore, France dispatched Falcon 200 reconnaissance aircraft to conduct surveillance activities against illicit maritime activities, including ship-to-ship transfers with North Korean vessels. In 2019, the frigate “Vendémiaire” conducted surveillance activities in sea areas surrounding Japan including the East China Sea. From the viewpoint of enhancing the effectiveness of the UN Security Council resolutions, Japan and France engaged in cooperation activities, including information sharing. As part of the long-term distant voyage mission conducted from 2020 to 2021, the French nuclear attack submarine “Émeraude” patrolled the South China Sea. After the completion of the activities, French Minister for the Armed Forces Florence Parly noted that France conducted the patrol mission, “To enrich our knowledge of this area and to affirm that international law is the only rule that is valid, whatever the sea in which we sail.” In this mission, the French nuclear attack submarine called at a base in the west of Australia, carried out joint exercises with Australian frigates, called at a port in Guam, and then participated in the Japan-France-U.S. trilateral exercise in the seas around Okinotorishima Island in December 2020. In January 2021, France released the Strategic Update 2021, a supplementary version of the 2017 Defense and National Security Strategic Review. France, in this update, expresses its vigilance against Russia’s strategic intimidation and China’s maritime expansion to the South China Sea, and its intention to engage more in the Indo-Pacific, stating that it will contribute to the region particularly in cooperation with Japan, Australia and India.

3 Germany

While Germany has been implementing a large-scale reduction of its military personnel since the end of the Cold War, it has been gradually expanding the dispatch of its federal forces overseas. At the same time, Germany has advanced the reform of its armed forces to enable them to execute multiple responsibilities encompassing conflict prevention and risk management in the context of multilateral organizations, including NATO, the EU, and the UN. However, following a worsening in the security

environment, in May 2016 Germany changed policy and announced that it would increase military personnel by around 7,000 by 2023.

The country’s defense white paper released in July 2016 for the first time in about 10 years explains that Germany’s security environment has grown more complex and unstable, causing gradually rising uncertainty, citing specific threats such as international terrorism, cyber attacks, interstate conflict, and the influx of refugees and immigrants. The white paper also states that Germany would continue to emphasize multilateral cooperation and cross-government approaches, while striving to realize rules-based international order.

In Iraq, Germany has provided support for capacity building, including providing education and training to the Iraqi Security Forces since 2015. In December 2015 following the terror attacks in Paris in November 2015, Germany expanded logistics support missions, such as reconnaissance and aerial refueling, for the Coalition that was conducting counter-ISIL military operations. Reconnaissance missions were completed in March 2020, while in October 2020, Germany decided to extend its logistical support missions, such as the capacity building assistance mission and aerial refuelling mission, until January 31, 2022.

In September 2020, the cabinet decision was made on the Policy Guidelines for the Indo-Pacific Region, which stipulated diplomatic guidelines for the Indo-Pacific. In the guidelines, Germany states the intention to strengthen its security policy engagement in the Indo-Pacific and clarifies its stance of emphasizing the cooperation with partners with shared values including Japan. As specific initiatives, monitoring UN sanctions against North Korea, taking part in exercises in the region, expanding the forms of maritime presence, expanding cybersecurity cooperation and other efforts are mentioned. In addition, Germany carried out online forums with Australia, Singapore, Japan and other countries based on the Policy Guidelines for the Indo-Pacific Region between November and December 2020, and proposed the strengthening of presence in the Indo-Pacific, and the enhancement of cooperation in the maritime, cyber and equipment domains. Furthermore, setting up the goal of a rules-based order, Germany announced the plan to send a frigate to the Indo-Pacific in the near future. Attention will be paid to Germany’s moves in relation to its involvement in the region going forward.

4 Canada

Canada promoted a significant reduction in defense spending after the end of the Cold War, partly due to financial challenges. In doing so, the number of active

personnel was reduced from approximately 89,000 at most to 60,000 or less, while the number of personnel in operational forces required for dealing with newly emerged security issues such as civil conflicts abroad and international terrorism was on the rise. In response to these situations, Canada concluded that the “peace dividend” slogan in the aftermath of the end of the cold war had been short-lived, and increased the defense spending for a certain period and the number of military personnel from 2000.

In June 2017, the Department of National Defence of Canada released the National Defence Policy for the first time in about nine years. In this policy, Canada mentions that the United States is “still unquestionably the only superpower,” while also stating the view that a degree of major power competition has returned among China with “increasing ability to project influence globally,” and Russia with “its willingness to test” the current security environment, which is causing the growing importance for re-emergence of deterrence. In accordance with this understanding of the security environment, Canada places importance on its own national land and the North American region on the basis of the national defense policy. Based on the idea that global security has a direct connection with Canadian defense, Canada positions active international contribution as a basis of the national defense policy. In terms of the building-up of defense capability, the Canadian defense policy focuses on the fields of space and cyberspace, intelligence, and remote control systems. It also states plans to increase the national defense budget, which once declined in the 2010s, by more than 70% in 10 years, and the Regular Force by 3,500 (to 71,500) military personnel. Furthermore, Canada released the Arctic and Northern Policy Framework in September 2019, setting up an objective to enhance Canada’s military presence, based on the recognition that strategic, military, and economic importance of the region is increasing.

Canada regards the United States as its most important ally and conducts air defense, space defense, and maritime patrolling and monitoring activities in North America jointly with the United States through the North American Aerospace Defense Command (NORAD). As a founding member, Canada also places



October 2020, Royal Canadian Navy frigate HMCS “Winnipeg” leaving Sasebo to engage in the implementation activity of the sanctions imposed against North Korea
[Department of National Defence of Canada]

an importance on its relationship with NATO, and has been actively participating in NATO-led operations in Central and Eastern Europe and Afghanistan. In addition, as a member of the Five Eyes (FVEY), an intelligence-sharing alliance, Canada receives a great deal of benefits and intends to continue deepening the relation with it. Canada traditionally supports the activities of the United Nations, and the Trudeau administration expresses its stance of re-emphasizing the contribution to the UN Peacekeeping Operations (PKO).

With regard to the Asia-Pacific region, Canada, in the above mentioned National Defence Policy, positions itself as a Pacific nation and shows the intention to engage in the region through strategic dialogues to exchange views on regional security issues, such as territorial disputes and the situation in the Korean Peninsula. According to the Policy, this also includes “a continued presence in the region through high-level visits and participation in regional exercises,” and working in cooperation with the United States, Australia and New Zealand on the regional security issues. Canada intends to seek stronger relationships with other countries in the region, particularly China, and also strives to strengthen the relationship with ASEAN countries. Since April 2018, as part of these engagements in the region, Canada has conducted surveillance activities against illicit maritime activities, including ship-to-ship transfers with North Korean vessels.⁴ Canada’s moves regarding the involvement in this region will continue to attract attention.

⁴ Initially, the Canadian Armed Forces were engaged in the implementation activity of the sanctions imposed against North Korea as part of the “Operation PROJECTION,” a maritime operation for global security and stability. In June 2019, Canada newly launched “Operation NEON” as an operation in the Asia-Pacific region and its armed forces have been engaging in the implementation activity within this framework.

Section 10

Middle East, North Africa, and Other Regions

1 Overview

The Middle East and Africa has long been one of the world's centers of civilization, religion, and trade, as well as a geopolitical bastion connecting Asia and Europe. Today, the Middle East is a major source of energy supply for the world and contains major routes for international commerce. Japan is also dependent on the region for approximately 90% of its crude oil imports. Peace and stability in the Middle East region is extremely important for the peace and prosperity of the international community, including Japan.

On the other hand, the Middle East and Africa region has been experiencing constant conflicts and unrest throughout the 20th century. In recent years, tensions have risen due to the situation in the Gulf region and the Middle East peace process. In addition, the Arab

Spring that occurred at the beginning of 2011 prompted regime change in some countries, but due to the turmoil that followed, almost a decade later, civil wars and the activities of terrorist organizations are ongoing in some of those countries. Countries such as Syria and Yemen have been exhausted by many years of civil war and facing a serious humanitarian crisis, and the domestic situations of these countries are further deteriorating along with the COVID-19 pandemic.

Meanwhile, some diplomatic progress has been made. For example, the normalization of diplomatic relations between Israel and some Arab countries was realized in 2020, and Saudi Arabia, the United Arab Emirates (UAE), Egypt, and Bahrain restored diplomatic relations with Qatar, with which these countries had cut ties in 2017.

2 Situation in the Gulf Region

1 Relevant Countries' Moves regarding JCPOA

On July 14, 2015, the final agreement concerning the nuclear issues of Iran, the Joint Comprehensive Plan of Action (JCPOA), was announced. Following this, on July 20, 2015, UN Security Council Resolution 2231 approving the JCPOA was adopted. In the agreement, it was decided that Iran would reduce its enriched uranium stockpile and the number of centrifuges, ban the production of weapons grade plutonium, and accept IAEA inspections, among other measures, in exchange for ending the sanctions of previous UN Security Council resolutions and the U.S. and EU's nuclear-related sanctions.¹ On January 16, 2016, the IAEA released a report confirming Iran's completion of the necessary preparatory steps to start the implementation of the JCPOA. Accordingly, the United States suspended its nuclear-related sanctions against Iran. In addition, the EU terminated some of its sanctions, and the provisions imposed by previous UN Security Council resolutions concerning the nuclear issues of

Iran ended, in accordance with UN Security Council Resolution 2231.

The IAEA regularly checks Iran's compliance with the agreement, but in May 2018, President Trump announced the withdrawal of the United States from the agreement for the reason that the current agreement was insufficient. In November 2018, the former Trump administration resumed all sanctions against Iran² and emphasized its readiness to cut a more comprehensive deal with Iran, urging Iran to sit down on the negotiating table.

Since then, the former Trump administration has repeatedly implemented economic sanctions against Iran with the aim of giving maximum pressure to it. In addition, the United States proposed at the UN Security Council a draft resolution of indefinite extension of the arms embargo on Iran, which was to be lifted in October 2020 based on UN Security Council Resolution 2231. However, Russia and China were opposed to this proposition, and no support came from the United Kingdom, France, and Germany, and therefore it was rejected.

¹ The major nuclear-related restrictions on Iran in the JCPOA include the following: with regard to uranium enrichment, limiting the number of centrifuges for uranium enrichment to 5,060 or less, keeping the level of uranium enrichment at up to 3.67%, and restricting Iran's enriched uranium stockpile to 300 kg; and with regard to plutonium production, redesigning and rebuilding the Arak heavy water reactor to not produce weapons grade plutonium, and shipping spent fuel out of Iran, and not engaging in reprocessing spent fuel including R&D and not constructing reprocessing facilities. According to then U.S. Secretary of State Kerry, with this agreement, Iran's breakout time (the time it takes to accumulate the amount of fissile material needed for a single nuclear weapon) will be extended from 90 days or less before the JCPOA to a year or more. Furthermore, the JCPOA is an agreement pertaining to nuclear issues and does not suspend or lift sanctions related to international terrorism, missiles, human rights, among other issues.

² The sanctions include a ban on the Iranian Government's purchases of U.S. dollars, a prohibition on purchases of oil, petroleum products and petrochemical products from Iran, and a ban on transactions with Iranian financial institutions, including the central bank. In May 2019, Significant Reduction Exceptions, which relate to a ban on some countries and regions' purchase of Iranian oil, etc., were also abolished.

Meanwhile, Iran opposed the resumption of sanctions by the United States and announced that while it would not withdraw from JCPOA after May 2019, it would suspend its compliance with JCPOA step by step. In January 2020, as the final step of reducing compliance with JCPOA, Iran announced that it would waive its commitment to the restrictions on enrichment capacity. The U.K., France and Germany referred the developments to the JCPOA Joint Commission under the JCPOA Dispute Resolution Mechanism and called for Iran to once again fully fulfill its obligations under JCPOA. In response, Iran said that it would consider withdrawing from the NPT if the nuclear agreement issue is referred to the UN Security Council, and that if Europe observes the agreement, Iran would return to compliance with the agreement.

In this situation, incidents caused damage to buildings and parties related to nuclear development within Iran. For example, in July 2020, a fire broke out and an explosion hit nuclear-related facilities located in Natanz, damaging a part of equipment associated with centrifuge assembly. In November of the same year, a scientist seen as the central figure of the nuclear development in Iran was attacked and killed in Iran. Iran blamed Israel for its involvement in the incidents, but Israel has not made any clear statements regarding its involvement. In December 2020, Iran's parliament passed the law that requires the Government of Iran and the Atomic Energy Organization of Iran to expand the country's uranium enrichment activity. In January 2021, the Iranian Government announced that it had started the process of producing 20% enriched uranium at Fordo Facility in southern Teheran. The Iranian Government then made its stance clear once again that Iran would return to compliance with the agreement if the relevant countries were to comply with the obligations based on the JCPOA and the sanctions against Iran were to be lifted.

U.S. President Joe Biden, inaugurated in January 2021, showed his stance saying, "if Iran returns to strict compliance with the nuclear deal, the United States would rejoin the agreement as a starting point for follow-on negotiations." In April 2021, the United States and Iran launched indirect talks on the Iran nuclear deal. After the start of the discussion, an explosion at the nuclear-related facility in Natanz occurred, but after a few days, the Iranian Government announced the plan to start the process of producing 60% enriched uranium at Natanz facility.



The car that was being driven by Iranian nuclear scientist Mohsen Fakhrizadeh when he was attacked in a suburb of Teheran [AFP/Jiji]

2 Military Trends in the Gulf Region

While the situations surrounding the JCPOA were changing, various events including military moves have occurred in the Gulf region. Since May 2019, the United States has announced the dispatch of carrier strike groups and bomber units in response to Iran's threats to its own troops and interests. In June, Iran announced that it had shot down a U.S. drone with a surface-to-air missile in its territorial waters in the Strait of Hormuz. The U.S. acknowledged the fact that it was shot down, but claimed it was in international airspace, and revealed that then President Trump had called off the retaliatory attack at the brink of execution. In July 2019, the U.S. revealed that a U.S. amphibious assault ship had shot down an Iranian drone over the Strait of Hormuz as a defensive measure.

Furthermore, in May 2019, an oil pipeline facility in central Saudi Arabia was attacked by drones, temporarily halting the transportation of crude oil. In September, an oil facility in eastern Saudi Arabia was attacked, temporarily halving the country's oil production. The Houthis, a Yemeni anti-government armed group allegedly supported by Iran, initially issued a statement of responsibility for these attacks, but the United States and others have pointed to Iranian involvement in the September attacks. Iran has consistently denied this.

In response to this situation, the United States has expanded the number of U.S. troops deployed to part of the Middle East since May 2019 to reinforce its stance against Iran. For example, in July, it stationed troops in Saudi Arabia for the first time in nearly 16 years since 2003. In September and October, it announced the deployment of additional troops, including air defense missile forces.

In April 2020, an incident occurred in which a ship of the Islamic Revolutionary Guard Corps made an abnormally close approach to a U.S. Forces' ship in the Persian Gulf. The United States strongly criticized Iran for the dangerous act and the National Geospatial-Intelligence Agency advised that if an armed ship

approached within 100 meters of a U.S. Navy vessel, then such a ship could be interpreted as a threat and be subject to lawful defensive measures. In the same month, the Islamic Revolutionary Guard Corps launched a military satellite for the first time. In response, the United States denied the conventional Iranian claims that space development was conducted for peaceful purposes due to the potential military use of satellite launch technology for ballistic missiles. Furthermore, in July 2020, an Iranian airliner approached a U.S. fighter aircraft over Syria and several passengers were injured. The United States claimed that it had conducted a standard visual inspection of the airliner at a safe distance, while Iran accused the United States of having conducted acts illegal under international law.

On the other hand, since October 2019, there have been multiple attacks on U.S. military bases in Iraq. In December, a rocket landed on a base in northern Iraq, killing one American. The U.S. claimed Iranian involvement in the attack and bombed the stronghold of Kata'ib Hezbollah, one of the four Shiite³ armed groups allegedly supported by Iran. In addition, in January 2020, the United States killed Soleimani, commander of the Quds Force of Iran's Islamic Revolutionary Guard Corps (IRGC), who was operating inside Iraq with the organization's leaders, as a deterrent to further attack plans. The United States has long viewed the activities of the Quds Force as problematic for supporting terrorist organizations abroad. In April 2019, it designated the IRGC as a terrorist organization. Iran carried out a ballistic missile attack on Iraqi bases hosting U.S. military in retaliation for the killing of Commander Soleimani. However, the attack reportedly did not result in any deaths, and Iranian Foreign Minister Zarif expressed that Iran had completed commensurate retaliatory measures and did not want further tensions or war. Then President Trump also said the same day that he did not want to use military force against Iran. Both the United States and Iran made it clear that they wanted to avoid any further escalation.

However, incidents targeting U.S. interests in Iraq continued to occur, and two American military personnel were killed by a rocket attack on the U.S. Forces base in March 2020. In order to stop further attacks, the U.S. Forces carried out air strikes against the stronghold of Kata'ib Hezbollah again. Amid such a situation, in June the same year, the Strategic Dialogue between the United States and Iraq was held. In the dialogue, the Government of Iraq reaffirmed its commitment to protecting the

military personnel of the International Coalition against ISIL, including the U.S. Forces stationed in the country, and the Iraqi facilities hosting them, and the two countries agreed to advance the discussion of reducing the U.S. Forces in Iraq. In September 2020, the number of military personnel of the U.S. Forces stationed in Iraq was reduced from 5,200 personnel to 3,000 personnel, which was further reduced to 2,500 by January 2021.

Despite these efforts by the U.S. and Iraq governments, similar attacks still continued to occur. In response to the incident involving the injury of one American soldier in February 2021 after the inauguration of the Biden administration, the United States conducted an air strike against a facility in eastern Syria, which is believed to have been used by Iran-backed militia groups including Kata'ib Hezbollah.

3 Maritime Security in the Gulf Region

Since May 2019, events affecting the navigation safety of civilian vessels have occurred sporadically in the waters of the Middle East. Specifically, in May 2019, four tankers (two Saudi Arabia-flagged and one each from the United Arab Emirates and Norway) were attacked in the Gulf of Oman. In June, two vessels, including the chemical tanker *Kokuka Courageous* operated by a Japanese shipping company, were attacked in the Gulf of Oman. With regard to the series of attacks, the United States and others have pointed out that they were committed by Iran, while Iran has consistently denied any involvement. Based on a comprehensive review of the information on the attack on the *Kokuka Courageous*, technical analysis of the damage to the vessel, and testimony from the parties concerned, Japan believes that the damage to the vessel is highly likely to have been caused by limpet mines.⁴ Furthermore, in January 2021, explosives, believed to be limpet mines, were found to be installed in a Liberia-flagged tanker located off the coast of Iraq and were eliminated by the Iraq military authority. With no one claiming responsibility for that incident, the Iraqi authority has been conducting an investigation into it. In February 2021, it was reported that a cargo ship owned by an Israeli company exploded while sailing through the Gulf of Oman, which damaged the hull of the ship. Israel suggested Iran's involvement in the incident, but Iran has denied it. In March and April, other explosion and attack incidents involving Iran- and Israel-related ships occurred one after another.

Amidst rising tensions in the Middle East, countries

³ One of the two major sects of Islam. The division with the Sunnis originated in differences in views on the successors (calliph) to the Prophet Muhammad (died in 632), the founder of Islam. At present, Shia Islam is the state religion in Iran, and Shiites make up about 60 percent of the population in Iraq. The largest sect, the Sunnis, have a majority in most of the Muslim countries in the Middle East and North Africa region.

⁴ A type of underwater weapon. Generally, they are placed on the hull of a ship and denoted for the purpose of making it impossible for the ship to navigate.

continue carrying out efforts to safeguard maritime security in the region. The United States proposed the Maritime Security Initiative in July 2019 and established the International Maritime Security Construct (IMSC) with its command center opened in Bahrain in November. In addition to the United States, IMSC has been joined by seven countries, including the United Kingdom, Saudi Arabia, the UAE, Bahrain, Albania, Lithuania, and Estonia (as of March 2021). In Europe, eight countries (France, the Netherlands, Denmark, Greece, Belgium, Germany, Italy and Portugal) issued a statement in January 2020 to politically support the creation of the European Maritime Awareness in the Strait of Hormuz (EMASOH) mission. France, the Netherlands, Denmark, Belgium, and Greece have dispatched their assets so far.

On the other hand, in September 2019, Iran presented a plan named HOPE (Hormuz Peace Endeavor) as an independent effort to maintain security in the Persian Gulf and the Strait of Hormuz, and called on the countries concerned to join. In December, Iran also conducted the Maritime Safety Belt, the first trilateral military exercise with the Chinese and Russian navies in the Gulf of Oman and other areas to ensure the safety of maritime traffic routes. In addition, in February 2021, Iran and Russia carried out a bilateral military exercise, “Maritime Security Belt,” in the northern Indian Ocean.

Japan needs to continue to pay close attention to the future developments surrounding the situation in the Gulf region.

3 The Situation Surrounding Middle East Peace

Since the foundation of Israel in 1948, there have been four wars between Israel and Arab countries. Subsequently, the Oslo Accords, signed between Israel and Palestine in 1993, initiated a full-fledged, negotiated peace process. In 2003, both Israel and Palestine accepted the Roadmap for Peace that laid out a path to the realization of the two-state peace initiative based on peaceful coexistence, but it has not been implemented. In the Palestinian territories, the moderate Fatah, which governs the West Bank of the Jordan River, and the Islamic fundamentalist Hamas, which effectively controls the Gaza district, are in conflict, splitting the area.

In such circumstances, the then U.S. Trump administration announced its recognition of Jerusalem as the capital of Israel in December 2017 and moved the U.S. embassy from Tel Aviv to Jerusalem in May 2018. In reaction, protests have been repeated mainly in Gaza, with protesters killed and injured through their clashes with Israeli forces. Tensions have increased intermittently as Israel carried out air strikes on Gaza to counter rocket attacks from Gaza. In addition, in March 2019, the then Trump administration recognized Israeli sovereignty over the Golan Heights, drawing criticism from various Middle Eastern countries. In January 2020, the administration announced a new Middle East peace plan, but the Palestinian side has refused to negotiate, opposing the plan’s descriptions concerning the Israeli-Palestinian border and the possession of Jerusalem.

Meanwhile, the then Trump administration actively encouraged Israel and Arab countries to realize a peace agreement. In recent years, moves for developing relations between Israel and some Arab countries had been reported. Supported by the then Trump administration’s mediation effort, in and after August 2020, the UAE, Bahrain,

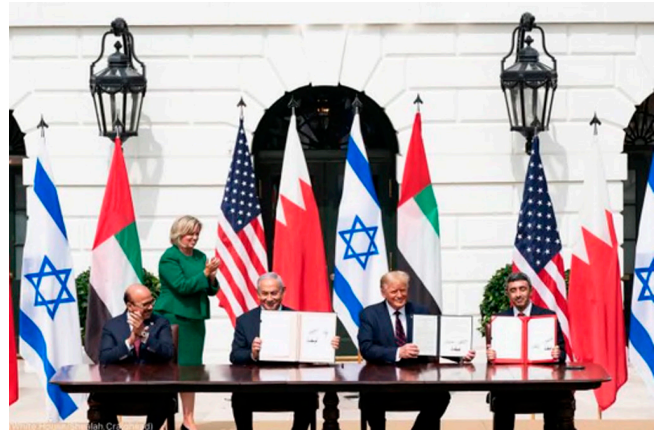
Sudan, and Morocco successively reached agreements for the normalization of diplomatic relations with Israel. The establishment of diplomatic relations between Arab countries and Israel was the first such event since Egypt (1979) and Jordan (1994). At the signing ceremony for the agreement for the normalization of diplomatic relations in September 2020, when the representatives of Israel, the UAE and Bahrain gathered together in the White House, President Trump described the significance of the deal, saying, “After decades of division and conflict, we mark the dawn of a new Middle East.” On the other hand, U.S. Secretary of State Pompeo suggested the aspect of these agreements as pressure on Iran, stating that the agreement demonstrated weakening regional influences of Iran and its deepening isolation.

Israel intends to promote cooperation with the UAE and Bahrain in establishing embassies and launching direct flights, and also in a wide range of fields including economy and technology. In fact, Israel opened its embassy in the capital Abu Dhabi of the UAE in January 2021, and the UAE ambassador arrived in Israel in March. Furthermore, Israel, along with the normalization of diplomatic relations with the UAE, changed its previous stance. For example, Israel temporarily suspended applying its sovereignty to the West Bank, and announced that it would not oppose the U.S.’s sale of F-35 fighter jets, which are owned only by Israel in the Middle East, to the UAE, as long as Israel’s military superiority is maintained.

Palestinian factions opposed these moves towards the normalization of diplomatic relations, viewing them as a betrayal of the cause of Palestine, and this led to protests across Palestine. Meanwhile, in September 2020, the Fatah and Hamas showed some positive moves

towards a compromise, in that they agreed to implement a vision for ending the conflict and the presidential and legislative elections for the Palestinian Authority, which was last held in 2006. In and after October 2017, the Fatah and Hamas continued direct negotiations on the transfer of the administrative control of the Gaza Strip to the Fatah under Egyptian auspices, but the talks had remained stalled.

Amid the changing situations surrounding the Middle-East peace process, a close eye will be kept on future developments regarding the Middle East peace process, including the United States' engagement, as well as the direction of negotiations on the transfer of the administrative control of the Gaza Strip.



At the signing ceremony for the agreement for the normalization of diplomatic relations between Israel and the UAE/Bahrain (At the White House) [U.S. Department of State]

4 Situation in Syria

Violent clashes in Syria since March 2011 pit four parties, the Syrian Government forces, opposition forces, Islamic extremist forces, and Kurdish groups, against each other. However, the government forces have gained the upper hand overall with support from Russia, recapturing Aleppo, which was once the largest stronghold of rebel forces, the suburbs of the Syrian capital of Damascus and areas close to the Syria-Jordan border.

In Idlib, a rebel stronghold even today, Russia, which had been supporting Syrian Government forces, and Turkey, which had been backing the rebels, agreed in September 2018 to establish a DMZ in Idlib and withdraw heavy artillery and militant groups from the zone. However, there was no progress with regard to the withdrawal of the militant groups. Since April 2019, Syrian Government forces and Russian forces had expanded air and ground operations into Idlib and besieged some of the Turkish military ceasefire monitoring stations set up around Idlib. In February 2020, the Turkish forces dispatched reinforcements to Idlib in response to the advance of the Syrian Government forces, but the forces were shelled by the Syrian Government forces, against which the Turkish forces retaliated, reportedly causing casualties on both sides. Subsequently, the fighting between the Turkish forces and the Syrian Government forces expanded. The Syrian Government forces were faced with intensified resistance from the dissidents and the militants, who were reinforced by the Turkish forces. The forces and militants fought back and forth over the key points of traffic through Idlib. In March 2020, Turkey held a summit meeting with Russia, which had been backing Syria, and agreed to a ceasefire in Idlib. However, even after the agreement, battles have occurred intermittently and a complete ceasefire has not been realized.

Meanwhile, the peace talks have so far made little progress. Since January 2016, there have been talks between the government and opposition forces under UN auspices. However, the fighting between both sides did not abate, disrupting the talks. Under the circumstances, peace talks led by Russia, Turkey, and Iran have continued in Astana (current Nur-Sultan), Kazakhstan, since January 2017. In January 2018, the Syrian National Dialogue Congress was held in Sochi, Russia, where an agreement was reached to establish a constitutional committee towards the enactment of a new constitution. In December 2018, Russia, Iran and Turkey agreed to hold the first meeting of the committee as early as possible in 2019. The first meeting was held in October 2019 under the auspices of the UN, but to date there has been no substantive progress in the political process.

In addition, conflicts among the countries and forces involved over the Kurds inside Syria have surfaced. In October 2019, following a summit telephone talk with Turkey, the United States issued a statement that Turkey would soon begin an operation in the northern part of Syria and that U.S. forces would withdraw from the immediate area of operation. After the release of the statement, Turkey launched a military operation against Kurdish groups, which the country perceives as terrorist organizations, as well as ISIL, in order to eliminate the terrorist threat from the border zone with Syria and establish a “safe zone” that would enable the return of Syrian refugees inside Turkey, and took control of parts of the northeastern region of Syria. Subsequently, Turkey and the United States agreed on the suspension of military operations and the withdrawal of Kurdish groups from the “safe zone.” Turkey also held talks with Russia, and agreed on the withdrawal of Kurdish groups from the border zone and joint patrols by Russian military

police and Turkish forces in northeastern Syria. Over these developments, Russia's growing military presence has been noted, including the reported deployment of a helicopter unit at the airport in the northeastern Syrian city of Qamishli as part of the patrol operation. Furthermore, the Syrian Government agreed with the Kurdish groups to send the Syrian Government troops to the northeast, advancing into Manbij, one of the Kurdish groups' strongholds, which indicates coordination between the Kurdish groups and the Syrian Government to counter Turkey's military operations. The agreement was allegedly mediated by Russia, suggesting that Russia's influence is expanding. It has also been pointed out that in the wake of Turkey's military operations, counterterrorism activities by Kurdish groups, which has played a central role in the fight against ISIL, were suspended, and some ISIL fighters and their families fled from camps controlled by Kurdish groups.

Moreover, concerning Iranian presence in Syria, confrontation between Iran and Israel has come to the surface. In January 2019, Israeli Prime Minister Netanyahu announced an attack on a weapon storage facility at

Syria's Damascus Airport, expressing his determination to take resolute actions against the Iranians in Syria. Due to the repeated attacks believed to be conducted by Israel targeting Iranian forces in Syria, there are concerns that the escalation of confrontation between Israel and Iran would affect Syrian and regional stability.

Amid the still unstable situation in Syria, the United States continues to have some of its troops stationed in the country to mop up ISIL. In September 2020, the U.S. Forces announced that it had dispatched mechanized infantry forces stationed in Kuwait to eastern Syria to show its intention to protect the Coalition of the Willing Forces. In Eastern Syria, obstructive acts have been sporadically occurring between the U.S. Forces and the Armed Forces of Russia. In the month before the announcement regarding the U.S. Forces dispatch, an accident occurred in which a Russian military vehicle collided with a U.S. military vehicle and caused injuries.

Relations between various forces over the Syrian situation have been complicated, with peace talks being stalled. Further initiatives from the international community towards the stabilization of Syria are required.

5 Situation in Yemen

In Yemen, following anti-government protests that occurred from February 2011 and international pressure afterward, then President Ali Abdullah Saleh agreed to resign in accordance with the Gulf Cooperation Council (GCC) initiative. Through the election held in February 2012, then Vice President Abd-Rabbu Mansour Hadi was elected as the new President.

Meanwhile, the confrontation intensified between the government and the opposition insurgent group Houthis, based in northern Yemen. As the Houthis invaded the Yemeni capital of Sana and the southern Yemeni city of Aden, to which President Hadi evacuated, the President requested support from Arab countries. In response, in March 2015, coalition forces led by Saudi Arabia began air strikes against the Houthis. In response, the Houthis also launched attacks on the mainland of Saudi Arabia with ballistic missiles and other weapons.

A series of peace talks mediated by the UN took place between April and August of the same year, but no final peace agreement was reached, with the talks suspended. Peace talks were planned for September 2018 but failed to be implemented with the Houthis refusing to participate. In December 2018, however, peace talks were held in Stockholm, the capital of Sweden, leading to the signing of an agreement on a ceasefire in Hodeidah, which has the biggest port in the country, and the exchange of prisoners. In January 2019, the UN Security Council decided to

send a ceasefire monitoring group to Hodeidah.

Despite the progress in the peace talks, negotiations on specific measures toward the ceasefire did not go smoothly, with the terms of the agreement, including the ceasefire in Hodeidah, failing to be implemented. On the other hand, the Houthis, stating that they had carried out attacks against Saudi Arabia, including an attack on an oil facility in Saudi Aramco in September 2019, declared in September 2019 that they would cease attacks on the country on the condition that the coalition forces ceased its air strikes. Also, in November 2019, as there were reports that Saudi Arabia and the Houthis were engaged in negotiations behind the scenes, Saudi Arabia announced that it had released 200 Houthi prisoners of war. In addition, in the same month, the UN Special Envoy for Yemen reported that airstrikes by the coalition forces had decreased significantly. Despite the momentum for a ceasefire, Saudi Arabia carried out air strikes against the Houthis after a missile launched by the Houthis landed on a Yemeni Government's military base and killed more than 100 soldiers in January 2020. In retaliation, the Houthis announced that they had carried out drone and missile strikes against oil facilities in southern Saudi Arabia. Since then, there have been sporadic attacks on Saudi Arabia by the Houthis, and the Saudi-led coalition has also continued to bomb the Houthis. In November 2020, the Houthis attacked an oil facility in western Saudi

Arabia and caused a fire. The Houthis also continue to fight with the Yemeni Government's military, and battles are intensifying particularly in Hodeidah and Marib, areas rich in natural resources.

In addition, it has been pointed out that the Houthis receive weapons supplies from Iran.⁵ In fact, in February 2020, the U.S. forces announced that it had boarded and inspected a small vessel in the Arabian Sea and seized a large amount of weapons from the vessel. The U.S. forces affirmed that the seized weapons were made in Iran, concluding that they were intended to be supplied to the Houthis in Yemen, and pointing to them as a violation of the UN Security Council resolution prohibiting the supply, sale and transfer of weapons to the Houthis.

While the situation surrounding the Houthis was changing, in August 2019, fighting broke out between the Yemeni Government and the Southern Transitional Council (STC), a separatist group in southern Yemen, which led to the STC's occupation of Aden (Yemen's interim capital). However, after mediation efforts by

Saudi Arabia and others, the Yemeni Government and STC signed the Riyadh Agreement in Riyadh, the capital of Saudi Arabia, in November 2019. The agreement established a new government with the participation of both sides. While the confrontations between both sides continued and the Riyadh Agreement remained unfulfilled, in December 2020, Yemen's new cabinet was established based on the agreement. Despite this progress, an attack, believed to have targeted the ministers of the new cabinet, occurred at the airport in the southern Yemeni city of Aden in the same month, in which many people were killed and wounded. The Government of Yemen treated this attack as an act of terrorism by the Houthis and denounced it.

The Biden administration of the United States has set out a policy of strengthening diplomacy to end the war in Yemen and completely ending its support for offensive operations in the country. However, with the Houthis intensifying their offensive, there is no prospect of a ceasefire or eventual peace agreement across Yemen.

6 Situation in Libya

In Libya, following the collapse of the Gaddafi regime in 2011, elections for a General National Congress were held in July 2012, establishing a congress consisting mainly of Islamists. In June 2014, elections for a Council of Representatives were held to establish a new congress to replace the General National Congress. However, since secularists became the majority, the confrontation between Islamic and secular groups over the transfer of power to the Council of Representatives intensified, and consequently, Libya became fragmented between east and west, with two assemblies existing in parallel – the Islamic groups' General National Congress based in the capital city of Tripoli and the secular groups' Council of Representatives based in Tobruk in eastern Libya. In December 2015, the UN mediated a political agreement for Libya, and the Government of National Accord (GNA) was established as a national consensus government under the agreement. However, as Islamic groups took control of the new government, secular groups turned their backs and refused to join the GNA. As a result, Libya remains divided between the east and the west. Furthermore, militias supporting either the east or the west have continued sporadic military clashes. In September 2018, militias active in the west clashed, leading to an emergency declaration. In April 2019, Commander Haftar's LNA, the largest forces in eastern

Libya, advanced into a suburb of the capital city of Tripoli and clashed with militias subordinate to the GNA in western Libya, leading to an exchange of air strikes.

Some pointed out that the fact that both eastern and western forces received military support from the countries involved, including Unmanned Aerial Vehicles (UAVs), also led to the escalation of the war, and the struggle between the two parties was described as a "drone war."⁶ It has also been pointed out that mercenaries from a Russian private military company have been dispatched to Libya to support the LNA, while Turkey has dispatched Turkish forces and the Syrian fighters it has been supporting to Libya at the request of the GNA.

Amid this situation, an international conference on Libya was held in Berlin in January 2020. The conference was attended by western countries, including the United States, the United Kingdom, France, and Turkey, as well as the UAE and Egypt, which are said to be supporting the LNA. The countries agreed to strengthen cooperation toward a ceasefire, stop military intervention in Libya, and enforce an arms embargo.

However, the battle continued even after the agreement and the forces on the GNA side, which received additional support from Turkey, intensified its counterattack. As a result, in June 2020, the GNA announced that it had regained control of the whole area of Tripoli. Afterwards,

⁵ According to Iran Military Power, a report released by the U.S. Defense Intelligence Agency (DIA) in November 2019

⁶ According to the final report of the Panel of Experts on Libya under UN Security Council Resolution 1973 (December 9, 2019)

amid the stalemated battle front, both sides called for an immediate ceasefire separately in August 2020, and a permanent ceasefire agreement was signed by the representatives of the GNA and the LNA in October of the same year. Furthermore, the UN-led political dialogue was launched between the forces in November 2020, and the interim Government of National Unity was approved in March 2021. Attention will be paid to the situation as to whether the new government can bring out specific

results to establish domestic governance and security.

Furthermore, ISIL, Al Qaeda, and other terrorist organizations are taking advantage of the unstable situation to expand into Libya, clashing with militias across the country. In particular, ISIL is believed to have been divided into small groups and hiding mainly in the southern desert areas, conducting suicide bombing and other terrorist attacks in such cities as Tripoli, the capital, indicating that terrorist attacks may continue in the future.

7 Situation in Egypt

In Egypt, then President Mubarak, who had been serving as the president for approximately three decades, resigned in 2011, and then President Mursi, who had been a member of the Muslim Brotherhood, a Sunni political organization founded in 1928 as a mass organization working for the “revival of Islam,” took office. However, in June 2013, large-scale public protests occurred amidst the poor economic situation and the deterioration of security. The military intervened in response and dismissed the president. In May 2014, then Defense Minister Abdel-Fattah el-Sisi was inaugurated as president. Since its inauguration, the el-Sisi administration has undertaken economic reforms including a shift to a floating exchange rate system and

the abolition of subsidies. However, enhancing domestic security measures is still a major challenge. In particular, the country’s mainland was subject to sporadic large-scale terrorist attacks from 2013, when political turmoil took place, to 2017, and in November 2018, a terrorist attack occurred in the central part of the country, targeting Egypt’s minority Coptic Christians. Moreover, in the Sinai Peninsula, terrorist attacks on military and police forces have occurred sporadically mainly in the northern part, while the southern part is overall peaceful. Since February 2018, a counter-terrorism operation conducted by the Egyptian Armed Forces has been underway in the northern part of the Sinai Peninsula.

8 Situation in Afghanistan

In Afghanistan, the Taliban intensified its offensive as the NATO-led Resolute Support Mission (RSM) launched education, training and advice for the Afghan National Defense and Security Forces (ANDSF) in the wake of ISAF’s withdrawal in December 2014. Meanwhile, the ANDSF faces challenges regarding logistics, morale, air capabilities, and troop-commander leadership, allowing the Taliban to expand its control in Afghanistan. Furthermore, Islamic State of Iraq and the Levant – Khorasan Province (ISIL–KP) has sustained terrorist attacks mainly in the capital city of Kabul and eastern Afghanistan since 2015. As a result, suicide bombing and assaults in which the Taliban or ISIL is believed to be involved have occurred one after another across the country, leaving Afghanistan in an unstable security situation. According to a report released by the U.S. Special Inspector General for Afghanistan Reconstruction (SIGAR) in October 2018, the areas controlled or influenced by the Afghan Government accounted for approximately 55.5% of Afghan territory, the lowest since December 2015, when the survey started.

Since the fall of 2018, the United States has

conducted peace talks with the Taliban after appointing Khalilzad as the Special Representative for Afghanistan Reconciliation. The talks had some twists and turns, including a three-month suspension from September 2019, but in February 2020, an agreement was signed between the United States and the Taliban that included the conditional phase-out of U.S. forces in Afghanistan and the start of negotiations among Afghans. In March 2020, the United States announced that it had begun the withdrawal of its forces. Also in the same month, the UN Security Council unanimously adopted a resolution in support of the agreement. In accordance with the agreement, a mutual release of prisoners and captives was realized between the Afghan Government and the Taliban as confidence-building measures, and in September 2020, the peace talks between the Afghan Government and the Taliban began in Qatar. However, the Taliban have continued their attacks on Afghan security forces and violent acts are intensifying in some areas. The United States had reduced the size of the U.S. Forces in Afghanistan to 2,500 personnel by January 2021, and President Biden announced in April the

withdrawal of the U.S. Forces by September 11, 2021.

Under these circumstances, President Ghani, who was re-elected in the September 2019 presidential election in Afghanistan, held a presidential inauguration ceremony in March 2020. However, former Chief Executive Abdullah accused Ghani of fraud in the election and held his own presidential inauguration ceremony, causing political turmoil. In May 2020, President Ghani and

Abdullah signed a power sharing agreement on inclusive governance for Afghanistan, and a decision was made that Abdullah would play the leading role in the Afghan Peace Talks with the Taliban.

A close eye will be kept on the future progress of the agreement between the United States and the Taliban and the Afghan Peace Talks.

9 Situation in South Sudan

The second North-South civil war in Sudan, which had continued since 1983, came to an end in 2005 with the entry into force of the Comprehensive Peace Agreement (CPA) concluded between the Sudan People's Liberation Movement Army (SPLM/A), the predecessor of the current administration in southern Sudan, which later became the government army, and the al-Bashir administration. In July 2011, the Republic of South Sudan was separated and gained independence from the Republic of the Sudan following the referendum based on the CPA.

However, the conflicts within the SPLA, which had existed since the independence, continued. By the time when the current transitional government was established in 2020, two large-scale armed confrontations occurred due to political conflicts between President Salve Kiir, representing the largest power of the Dinka, and First Vice President Riek Machar, who represents the second largest power of the Nuer.

The first confrontation occurred in the capital Juba in December 2013. Through the mediation of the Intergovernmental Authority on Development (IGAD) with the support by the United Nations and the AU, the government side and the pro-Machar faction signed the peace agreement, the Agreement on the Resolution of the Conflict in South Sudan (ARCSS) in August 2015. Based on the Agreement, the Transitional Government of National Unity was established, with Mr. Kiir serving as president and Mr. Machar as first vice president, in April 2016.

However, in July 2016, three months after the establishment of transitional government, the second armed conflict occurred between the security forces

of President Kiir and First Vice President Machar. After First Vice President Machar fled the country, and President Kiir dismissed First Vice President Machar, clashes started to occur again between the government and the Machar faction.

Given this situation, the IGAD held the High-Level Revitalization Forum in June 2017 in an attempt to revitalize the ARCSS. In June 2018, President Kiir, former First Vice President Machar and others adopted the "Khartoum Declaration of Agreement on South Sudan," which includes a permanent ceasefire. They agreed on security arrangements in July and on transitional government arrangements in August, before officially signing the "Revitalized Agreement on the Resolution of the Conflict in South Sudan (R-ARCSS)" in September 2018.

Initially, the transitional government was scheduled to be established in May 2019, but it was finally realized in February 2020 after two extensions of the pre-transitional period. The R-ARCSS expects to hold a presidential election in March 2022, and the inauguration of the formal government in South Sudan in May of the same year, while the implementation of the R-ARCSS, including the formation of a unified military force and other matters, tends to be delayed. On the other hand, in December 2020, both the government and opposition forces agreed to establish the provisional parliament and local governments. Attention will be paid to the moves towards the inauguration of the formal government going forward.

 Fig. I-2-10-1 (Current UN Peacekeeping Operations)
Part III, Chapter 3, Section 5-2-2 (UNMISS), p. 405

10 Situation in Somalia

Somalia plunged into anarchy on the collapse of its government in 1991, facing a serious humanitarian crisis with massive refugees generated. In 2005, the Transitional Federal Government (TFG) was inaugurated through the

intermediation of the neighboring countries. In 2012, a unified government was established for the first time in 21 years.

Even after the establishment of the unified government,

Somalia has faced two major issues — terrorism and piracy. Al-Shabaab, a Sunni extremist organization based in the central south, has repeatedly conducted terrorist attacks against the Government and other targets. In 2007, the African Union Mission in Somalia (AMISOM) was established with the approval of the UN Security Council. As a result of attacks by the AMISOM forces and mop-up operations by the Somali Government forces under reconstruction with support from Western countries, Al-Shabaab lost its control on major cities and weakened to some extent. However, its threat has still existed. Al-Shabaab frequently stages attacks against the bases of the Somali and AMISOM forces and terrorist attacks within Somalia and in AMISOM member countries. It has been pointed out that ISIL fighters have been flowing into Somalia in recent years.

Furthermore, in December 2020, the United States announced the withdrawal of most of the U.S. troops from Somalia and their relocation to other bases in East Africa. In the same month, the Somali Government announced that it had severed diplomatic ties with Kenya, which

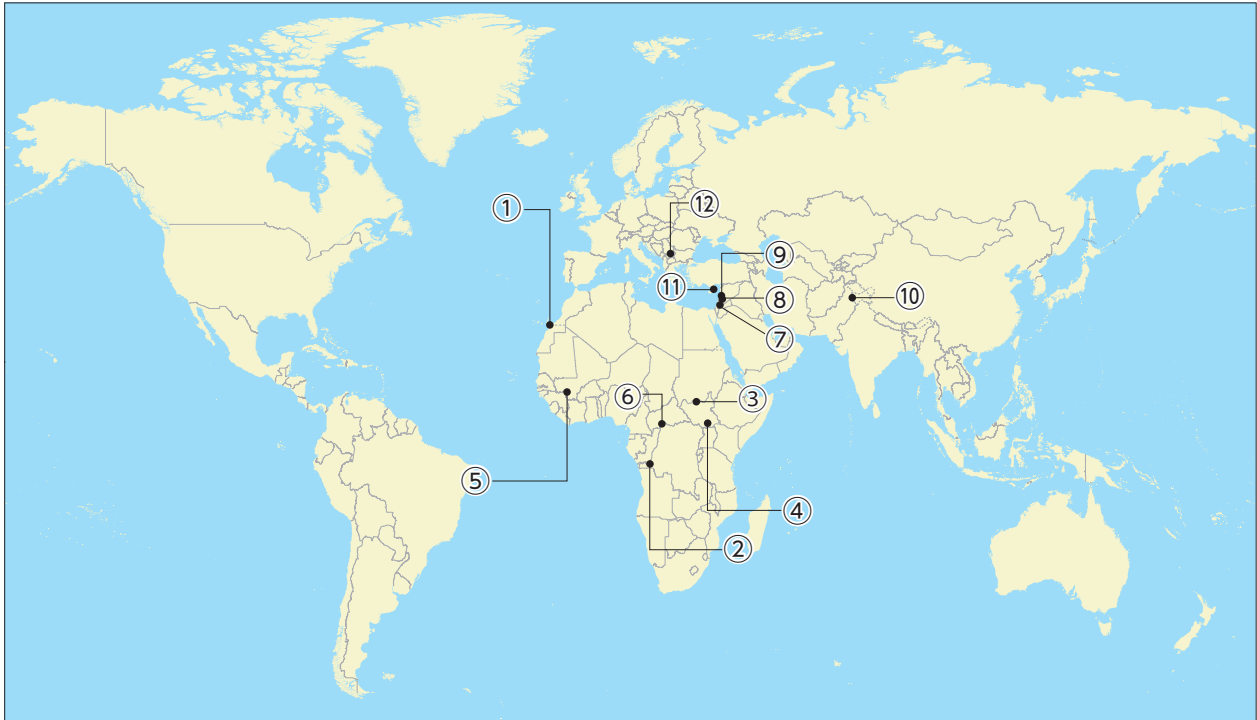
had been cooperating with Somalia in counterterrorism operations. These moves indicate that the environment surrounding counterterrorism is changing.

In Somalia, especially in its northeastern part, there are believed to be outposts of pirates who are active off the coast of Somalia and in the Gulf of Aden. The international community has continued anti-piracy operations and implemented a series of initiatives to enhance the security capabilities of Somalia based on the perception that instability of Somalia has caused the piracy issue. As a result, the numbers of reported pirate attacks for both 2019 and 2020 were both recorded as zero.

The parliamentary elections and presidential election, which were expected to take place towards the end of 2020, were still nowhere in sight even after the term of office of President Mohamed Abdullahi Mohamed (also known by his nickname Farmajo) ended on February 8, 2021. We should keep paying close attention to whether the situation in Somalia will start to stabilize, while also looking at the international community's response.

 See Part III, Chapter 3, Section 2-2 (Counter-Piracy Operations), p. 391

Fig. I-2-10-1 Current UN Peacekeeping Operations



Note: According to the United Nations (as of the end of March 2021)

Africa

	Mission	Date Established
①	United Nations Mission for the Referendum in Western Sahara (MINURSO)	Apr. 1991
②	United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO)	Jul. 2010
③	United Nations Interim Security Force for Abyei (UNISFA)	Jun. 2011
④	United Nations Mission in the Republic of South Sudan (UNMISS)	Jul. 2011
⑤	United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA)	Apr. 2013
⑥	United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA)	Apr. 2014

Middle East

	Mission	Date Established
⑦	United Nations Truce Supervision Organization (UNTSO)	May 1948
⑧	United Nations Disengagement Observer Force (UNDOF)	Jun. 1974
⑨	United Nations Interim Force in Lebanon (UNIFIL)	Mar. 1978

Asia

	Mission	Date Established
⑩	United Nations Military Observer Group in India and Pakistan (UNMOGIP)	Jan. 1949

Europe/CIS

	Mission	Date Established
⑪	United Nations Peacekeeping Force in Cyprus (UNFICYP)	Mar. 1964
⑫	United Nations Interim Administration Mission in Kosovo (UNMIK)	Jun. 1999

Trends Concerning New Domains including Outer Space, Cyberspace, and Electromagnetic Spectrum, and Relevant Challenges Facing the International Community

Section 1

Trends Concerning Military Science and Technology

1 Military Science and Technological Trends

1 General Situation

Recent developments in science and technology have impacted a variety of areas, triggering significant and revolutionary changes in many areas such as economy, society, and lifestyle. In the military field, cutting-edge technologies that are capable of drastically changing the future of combat modality, namely game-changing technologies, have appeared, and each country is actively investing in them. Some of these cutting-edge technologies, such as artificial intelligence, have been adopted from the civilian field into military technology.

Moreover, it has been pointed out that China has been attempting to acquire advanced technologies from other countries through the utilization of academic research, cyberspace, and spies, and other means.¹ In general, the protection of such technologies has become an important task.

2 Trends of Military Cutting-edge Technology

(1) Hypersonic Weapons

The United States, China, and Russia are developing hypersonic weapons, including Hypersonic Glide Vehicles (HGVs) that would be launched from ballistic missiles, maneuvered to glide at hypersonic speed (Mach 5 or above) after their entry into the atmosphere, and hit targets, as well as Hypersonic Cruise Missiles (HCMs) using scramjet engines and other technologies that enable hypersonic flights. It is suggested that hypersonic weapons would fly in lower orbits than ballistic missiles at hypersonic speed above Mach 5 for a longer period of time and have high maneuverability, which makes it difficult to be detected and intercepted.

The United States, in its Missile Defense Review

(MDR) (January 2019), indicates that Russia and China are developing advanced hypersonic weapons that challenge existing missile defense systems. The United States is focusing on the development of hypersonic weapons, with the announcement of its successful flight test on hypersonic weapons conducted in March 2020.

In the military parade to mark the 70th anniversary of China's founding in October 2019, the DF-17 ballistic missile, viewed as capable of carrying an HGV, made its first public appearance, and it was noted that the Chinese Academy of Sciences conducted a ground test for a scramjet engine in 2020.

Russia has announced that in 2022 it will deploy the new Sarmat intercontinental ballistic missile (ICBM), capable of carrying the Avangard HGV deployed in 2019. In 2020, the Russian Ministry of Defence made several announcements on the successful test launch of Zircon HCM, while President Putin stated that development is nearly complete.

(2) High-power Energy Technology

High-power energy weapons, such as electromagnetic railguns, high-power laser weapons, and high-power microwaves, are being developed as a means to counter various airborne threats.

The United States and China are developing electromagnetic railguns that use electromagnetic fields generated from electric energy to launch projectiles. Unlike missiles, projectiles for electromagnetic railguns have no propulsion systems and are smaller, less costly, and can be stored in smaller space, which supposedly makes it possible for electromagnetic railguns to efficiently counter massive missile attacks, if they become available for intercepting missiles. The United States has offered plans to mount electromagnetic railguns on warships by

¹ The U.S. DoD's "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China" (2020) cites multiple examples of illicit attempts to acquire sensitive, dual-use, and military-grade equipment.

2025 and it is pointed out that China would also deploy them by 2025.

The United States, China, and Russia are developing high-power laser weapons to destroy targets with laser energy. Laser weapons are expected as an effective and less costly means to intercept attacks by multiple small unmanned vehicles and boats. Though it depends on the technological maturity, high-power laser weapons would excel in the speed of response compared with conventional weapons, and they can be free from ammunition constraints. Therefore, laser weapons, if strengthened enough to intercept missiles, would be able to efficiently counter massive missile attacks.

The U.S. Air Force acquired an anti-UAV laser system in 2019. The United States has also successfully tested a 30 kW ship-based solid laser weapon system (LaWS) to counter small UAVs in the Persian Gulf in 2014. In a test conducted in the Pacific Ocean in May 2020, the U.S. Navy successfully neutralized a flying unmanned vehicle with its shipboard high-powered laser demonstrator. However, while the U.S. Air Force's SHIELD program, which aims to develop a laser weapon that can be installed on fighters, had planned a flight test originally in 2021, it was reported the test was postponed for two years due to the COVID-19 pandemic.

China exhibited the 30-100 kW "Silent Hunter" laser weapon system, capable of countering small UAVs, at the IDEX 2017 international defense exhibition. It is pointed out that China is developing higher-power laser weapon systems to attack satellites.

Russia has deployed the 10 kW Peresvet laser weapon system and it is reportedly developing a megawatt-class chemical laser weapon system for attacking satellites.

High-power microwave technology can cause destruction and malfunction in the electronic systems responsible for such functions as intelligence-gathering and command & communications aboard UAVs, missiles and other airborne threats. The United States has acquired the Phaser high-power microwave system in 2019. In a U.S. Army drill, the system reportedly countered two to three UAVs at one time and 33 UAVs in total.

capacity, among other areas.

The United States, China, and Russia have formulated their AI strategies and promoted relevant research and development under industry-government-academia collaboration. The U.S. Department of Defense (DoD) established the Joint Artificial Intelligence Center (JAIC) in June 2018 and indicated its policy of using AI in a lawful and ethical manner in "Summary of the 2018 Department of Defense Artificial Intelligence Strategy" released in February 2019. The Chinese government announced the "Next Generation AI Development Plan" in 2017, setting a target for China to become a major global AI innovation center by 2030. In Russia, President Vladimir Putin in 2017 acknowledged that AI leaders would rule the world. Its national AI development strategy through 2030, released in October 2019, cited such targets as the acceleration of AI technology development, support for scientific research, and the improvement of human resources development systems.

AI-using technologies being studied include situation assessment support systems to display data collected through various sensors in an easy-to-understand manner, as well as decision-making support systems to provide commanders with available options. In December 2019, the United States conducted demonstration tests on the Advanced Battle Management System (ABMS), which analyzes collected data with AI and promptly shares the analysis with combat troops using networks. Meanwhile, China has announced that an AI Military Simulation Competition was held by the Central Military Commission in July 2020 with the purpose of researching and developing next-generation command information systems.

The United States, China, and Russia are developing autonomous unmanned vehicles equipped with AI. Autonomous unmanned vehicles would generally combine unmanned vehicles technologies expected to be utilized in dangerous, dirty, and dull missions with AI technology capable of detecting adversary actions

3 Trends of Cutting-edge Technology Derived from the Civilian Field

(1) AI Technology

AI technology is one of the technology areas that shows rapid progress in recent years. It has been pointed out that the rapid AI progress has been exerting a great impact on the military field, including the application for autonomous unmanned vehicles and the cyber domain as well as supporting for command and decision-making and improving data processing



Simulated battle between AI and U.S. Air Force pilot [DARPA]

and battle situation changes, and enables intelligence, surveillance and reconnaissance (ISR) missions in a wide range of areas over a long time, without risking human lives.

The U.S. Defense Advanced Research Projects Agency (DARPA) is developing AI-equipped unmanned aerial vehicles (UAVs), including swarms of reusable, air-launched and air-recovered small UAVs for ISR missions, as well as unmanned surface vessels for locating submarines. Moreover, DARPA is also promoting R&D of automated air-to-air combat, with AI winning in a combat simulation against air force pilots.

In May 2018, the China Electronics Technology Group Corporation successfully performed a swarm flight of 200 AI-equipped unmanned vehicles, and in September 2020, a Chinese state-owned munition company publicly shared the status of the UAV swarm test. It is assumed that military operations including such swarm flights will be difficult to counter with conventional air defense systems.

In September 2019, Russia conducted a coordinated flight test between S-70 heavy unmanned combat aerial vehicle “Okhotnik,” stealth heavy unmanned combat aerial vehicle, and the fifth-generation fighter Su-57, and released the flight test footage publicly.

Some have argued that autonomous unmanned vehicles could develop into so-called Lethal Autonomous Weapons Systems (LAWS). Within the framework of the United Nations Convention on Certain Conventional Weapons (CCW), discussion on LAWS is continued from the perspectives of their characteristics, human elements, and international law.

(2) Quantum Technology

Quantum technology is positioned as an important technology which brings innovation to society by applying quantum mechanics that differ from familiar physics that people sense every day. For example, quantum cryptographic communications is a communication system which utilizes quantum cryptographic technology taking advantage of quantum characteristics, and reportedly cannot be deciphered by third parties. It is pointed out that quantum radar may be able to neutralize the stealth advantage of stealth aircraft by utilizing quantum characteristics. It is pointed out that quantum computers can compute problems in a short amount of time and with less electricity consumption than existing supercomputers and can also be applied to areas such as decryption.

China has developed the world’s longest quantum cryptographic communications network, extending over approximately 3,000 km and connecting Beijing and Shanghai. In addition, in August 2016, China launched

“Mozi,” the world’s first satellite to test quantum cryptographic communications. In January 2018, China said that it succeeded in using Mozi for long-distance quantum cryptographic communication between China and Austria. Positioning quantum computer development as a key science and technology project, China has also invested approximately 7 billion yuan in a national laboratory for quantum information and technology and other facilities.

(3) Fifth-generation Mobile Communications System (5G) Technology

The fifth generation wireless mobile network system (5G) has been gaining traction since commercial services were launched in countries one after another in April 2019 as a private mobile communications infrastructure. With its advanced information communications technology, 5G technology brings provision of high-quality services (high speed, low latency, large capacity, multiple and simultaneous connection/high reliability, etc.) to reality without showing signs of complex data processing.

In March 2020, the United States announced the National Strategy to Secure 5G, and in May 2020, the U.S. Department of Defense 5G Strategy was announced, which indicates defense policy approaches of the national strategy. The DoD’s strategy has indicated 5G as an extremely important strategic technology and that countries with proficient knowledge in cutting-edge technology developed via this will gain economic and military advantages. Moreover, it said that the protection of the 5G network system of the U.S. military and its allies and partners to ensure endurance and reliability will be the core task of the DoD and indicated measures, including those for allies and partners.

Australia has virtually excluded Huawei Technologies Co., Ltd. from its national 5G endeavors, while the company has not been able to partake in the national 5G business in New Zealand. The United Kingdom has stated it will eliminate all Huawei products from its 5G network by the end of 2027.

(4) Additive Manufacturing Technology

Additive manufacturing technology, as typified by three-dimensional printing, can produce goods that are too complex to be produced conventionally, at a much lower cost. Given this, 3D printer technology can bring revolutionary changes in logistics, such as not depending on the stock when procuring parts, and nations point out the military use of the technology. For example, the U.S. Army noted that the technology could trigger a real logistics revolution by making the transportation of spare goods unnecessary, and the U.S. Air Force announced it is manufacturing aviation engine parts that were pointed

out to be in shortage. In February 2019, seven European countries² launched a four-year joint project to study potential applications of 3D printer technology. The Australian Navy is considering using 3D printers for

producing parts for patrol boats. In India, state-run and private companies agreed in January 2020 to cooperate in a 3D printer project for the armed forces.

2 Trends Concerning Defense Technological and Industrial Bases

In recent years, the sophistication of military science and technology, and the greater complexity of equipment have caused a steep rise in equipment development and production costs and have raised unit prices for equipment procurement, while Western countries in particular have continued to face difficulties in increasing defense budgets significantly. Under these circumstances, many countries are taking on a variety of initiatives in order to maintain and enhance their national defense technological and industrial bases.

Western countries have set a target to increase competitiveness through the realignment of their defense industry, in light of the aforementioned situation related to national defense budgets. The United States has experienced repeated mergers and integrations among domestic corporations, while Europe has experienced cross-border mergers and integrations of the defense industry, especially in Germany, France, the United Kingdom, and Italy. In response to the escalation of development and production costs, Western countries are promoting joint development and production of equipment and technological cooperation among their allies and partners. This move aims for (1) sharing development and production costs, (2) expanding demand in all countries participating in joint development and production, (3) mutual complement of technologies, and (4) raising domestic technology levels by obtaining state-of-the-art technology.

For example, the joint development and production of the F-35 fighter jet led by the United States is the largest joint program. At present, there is anticipated demand for more than 3,300 aircraft.³ This project will have impacts on the defense technological and industrial bases of the countries involved, through the operation, sustainment and maintenance stages of the aircraft. The European Union (EU) has created the European Defence Fund (EDF)⁴ to provide funding for joint research and development by the EU member states in order to

promote their cooperation in developing and acquiring defense equipment and facilitate the efficient production of state-of-the-art and interoperable equipment.

There is an increasing number of cases where governments provide funding for national defense-related research and development conducted by the private sector. In the United States, for example, approximately US\$3.566 billion in research and development funding was requested for FY2021 for DARPA, whose mission is to make investments in breakthrough technologies that will contribute to national security. The U.S. defense authority has long provided substantial funding for the research conducted by companies and universities. In some other countries, such as the United Kingdom and Australia, responding to the recent utilization of dual-use technologies in defense equipment development, the governments have launched initiatives to provide funding for private sector research and development on innovative technologies in order to acquire advanced civilian technologies.⁵

Countries have exported equipment overseas since the Cold War era, and still today, many countries are taking measures to promote exports. While the United States, Russia, European countries and China have remained as leading defense equipment exporters, countries such as the Republic of Korea (ROK) and Turkey have been expanding exports of equipment, which is an outcome of their success in developing the equipment manufacturing bases owing to the imported equipment in the past and improvement of capabilities in science and technology.

Defense equipment imports by Asian and Oceanian countries have continued an uptrend in recent years, seemingly against the background of economic growth in the region as well as the expansion of the influence of China, the existence of territorial disputes, and responses to the military buildup in neighboring countries.

Some of defense equipment importing countries adopt

² The seven participating countries in the project are Finland, France, Germany, the Netherlands, Poland, Sweden, and Norway.

³ There are nine countries involved in the joint development and production of the F-35 fighter jets: Australia, Canada, Denmark, Italy, the Netherlands, Norway, Turkey, the United Kingdom, and the United States. The other countries acquiring them are Israel, the ROK, Belgium, Poland and Japan, whose defense technological and industrial base is involved in their production and maintenance. However, after Turkey purchased Russian S-400 missile systems, the United States decided in July 2019 to initiate the process to formally remove Turkey from the joint program.

⁴ The EDF was founded in June 2017.

⁵ In 2016, the United Kingdom launched the Defence and Security Accelerator (DASA) to build an innovation network of government, private sector and academics and created a fund for innovative research. In the same year, Australia announced the establishment of a Next Generation Technologies Fund for emerging technologies as well as a fund for innovative technology development.

Fig. I-3-1-1

Top Ranking Countries in Major Conventional Arms Export [2016-2020]

Country or region		Shares in the total global exports of defense equipment (%) 2016-2020	Comparison with 2011-2015 export value (%)
1	United States	37	+15
2	Russia	20	-22
3	France	8	+44
4	Germany	6	+21
5	China	5	-8
6	United Kingdom	3	-27
7	Spain	3	-8
8	Israel	3	+59
9	Republic of Korea	3	+210
10	Italy	2	-22

(Note) Created based on "SIPRI Arms Transfers Database." Only the top 10 countries by export value for 2016 to 2020 are indicated (figures are rounded to the nearest whole number).

offset policies⁶ in order to keep a good balance between improving defense capabilities through imports and developing domestic defense technological and industrial bases by requesting domestic companies' participation in parts production and others as conditions for procuring equipment and services from abroad.

Fig. I-3-1-2

Trends in Import Value of Major Conventional Arms in Asia and Oceania [2016-2020]

Country or region		Import value (100 million US dollars) 2016-2020	Comparison with 2011-2015 import value (%)
1	India	132.71	-33
2	Australia	70.79	+41
3	China	65.97	+6
4	Republic of Korea	60.07	+57
5	Pakistan	37.53	-23
6	Japan	30.48	+124
7	Viet Nam	24.96	-41
8	Singapore	23.66	-9
9	Indonesia	23.63	-18
10	Bangladesh	17.20	-4

(Note) Created based on "SIPRI Arms Transfers Database." Only the top 10 countries by import value for 2016 to 2020 are indicated (comparison (%)) rounded to the nearest whole number).



Fig. I-3-1-1 (Top Ranking Countries in Major Conventional Arms Export [2016-2020])

Fig. I-3-1-2 (Trends in Import Value of Major Conventional Arms in Asia and Oceania [2016-2020])

⁶ Offsets in defense trade are defined as encompassing a range of industrial and commercial benefits, such as co-production, licensed production, subcontracting, technology transfer, and assistance in purchase and payment, according to "Offsets in Defense Trade" by the U.S. Department of Commerce Bureau of Industry and Security.

Section 2

Trends in Space Domain

1 Space Domain and Security

In recent years, technology leveraging outer space has been applied to various areas, growing more important as key infrastructure for both the public and private sectors. As the Outer Space Treaty, which took effect in October 1967, stipulates that outer space is not subject to national appropriation and that all States Parties to the treaty shall use it freely for peaceful purposes, major countries have been making proactive efforts to use outer space for maintaining peace and safety in the security area.

There is no concept of national borders in outer space, meaning that the utilization of satellites enables the observation of, communication at, and positioning on any area on the Earth. Thus, major countries make efforts to enhance the capabilities of a variety of satellites and launch them for the purpose of enhancing C4ISR (command, control, communication, computer, intelligence, surveillance, and reconnaissance), functions. Such satellites include satellites for reconnoitering military and other facilities, early warning satellites for detecting the launch of ballistic missiles, communication satellites for communications, and positioning satellites for enhancing the precision of weapons systems. Also, in the United States, the Space Development Agency takes the lead in implementing the mega constellation plan for launching several hundred small satellites for the detection and tracking of missiles, communication, reconnaissance, positioning and Situational Space Awareness (SSA). It is pointed out that by achieving this plan the United States would be able to detect and track hypersonic weapons, which are difficult to detect using ground-based radar, from space without delay. In outer space, various countries are thus rapidly developing their capabilities to ensure their military superiority.

Meanwhile, from the viewpoint of ensuring their military superiority, various countries are also rapidly developing their capabilities to impede each other's use of outer space.

In January 2007, China conducted a test to destroy one of its aging satellites with a ground-launched missile. In addition, in December 2020, the United States pointed out that Russia conducted its second test launch of a ground-based anti-satellite missile of 2020. The destruction of satellites is viewed with concern by countries as a risk to their space assets including satellites because these actions could cause space debris.

Furthermore, countries including China and Russia are thought to be also developing an anti-satellite weapon (ASAT) that does not directly hit and destroy a satellite by a missile, thus creating less space debris. For example, it has been noted that ASATs under development include a “killer satellite” to approach a target satellite and utilize a robot arm to capture the target and disable its functions. On this point, it has been noted that China has carried out experiments in outer space in which they have maneuvered satellites close to other satellites to simulate the movements of a killer satellite. The United States has claimed that a satellite launched by Russia in 2017 and 2019 fired a high-speed flying object, exhibiting characteristics of a weapon. It has also criticized Russia for launching in 2019 another satellite that actively maneuvered near a U.S. satellite and had an “unusual and disturbing behavior” and condemned that such activity has the potential to create dangerous situations in outer space.

Furthermore, it has been pointed out that China and Russia are developing jammers for interfering with communications between target satellites and ground stations, and laser weapons for attacking target satellites.

It has also been noted that China and Russia have been enhancing capabilities to operate these anti-satellite capabilities and impede the United States and its allies from using outer space.¹ While threats in outer space, including the development of such various countermeasures, are pointed out to be growing, the United States and other countries increasingly position outer space as a warfighting domain or an operational domain, making outer space security an urgent challenge.


As the above illustrates, the risk to the stable use of outer space has become one of the critical security challenges for countries, thus it has become necessary to deal with this risk effectively in an effort to ensure stability in the use of outer space.

Against this backdrop, the existing international agreements do not have direct provisions on prohibiting the destruction of space objects and refraining from actions triggering space debris. Discussion has been under way recently by the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) and the Inter-Agency Space Debris Coordination Committee (IADC). In December 2020, the resolution “Reducing

¹ According to “Worldwide Threat Assessment,” the U.S. Director of National Intelligence (January 2019)

space threats through norms, rules and principles of responsible behaviours,” jointly proposed by Japan, the United Kingdom and others, was adopted by the General Assembly of the United Nations after being approved by 164 countries. This resolution recommends the investigation of threats to space systems and security risks, evaluation of responsible behaviors, and advancement of discussions. This resolution is expected to promote further progress in initiatives aimed at securing the sustainable

and stable use of space in the future. Moreover, countries are working on Space Situational Awareness (SSA) by monitoring the solar activity with a potential impact on satellites and electronic equipment on the Earth, and threats caused by meteors reaching Earth, in addition to threats posed by ASATs and space debris to space assets.

 See Part III, Chapter 1, Section 3-1 (Responses in Space Domain), p. 279

2 Various Countries' Outer Space Initiatives

1 The United States

The United States has proceeded with a variety of space activities in fields including military, science, and resource exploration, such as launching the world's first reconnaissance satellite and landing on the Moon. Today, the United States is the world's leading space power. This includes the world's first launch of a private-sector manned space flight by SpaceX in May 2020. The U.S. Forces clearly recognize the importance of outer space for their actions, and on this point, actively utilize outer space for security purposes.

The U.S. National Security Strategy (NSS) released in December 2017 pointed out that some countries are pursuing a variety of ASATs on the basis of belief that the capability to attack assets in outer space will give them asymmetrical advantages. The United States released its National Space Strategy in March 2018, demonstrating its recognition that its adversaries had turned space into a warfighting domain and vowing to deter and defeat threats in the space domain to protect the national interests of the United States and its allies. Additionally, in June 2020, the United States Department of Defense (DoD) announced the country's Defense Space Strategy (DSS), presenting guidelines for the next 10 years, which appraises China and Russia as the most serious and eminent threats. It also establishes the three targets of (1) build a comprehensive military advantage in space; (2) integrate military spacepower into national, joint, and combined operations; and (3) secure a stable space domain. Furthermore, the United States government says it will continue to use space for national security activities under the principles of the peaceful use of space found in the National Space Policy (NSP) announced in December 2020.

Also, in December 2020, Japan and the United States concluded a memorandum to carry two United States-

made payloads (SSA sensors) on Japan's quasi zenith satellite systems. These payloads plan to be launched from Tanegashima Space Center in 2023 and 2024, respectively.

Among U.S. government organizations, the National Aeronautics and Space Administration (NASA) under direct control by the President is responsible mainly for non-military space development, while the DoD undertakes research, development, and operation of military observation and reconnaissance satellites. In August 2019, the United States inaugurated the U.S. Space Command as a new geographic unified combatant command based on the Strategic Command's component in charge of space missions. In December 2019, the United States created the Space Force under the Department of the Air Force as the sixth military branch, with approximately 16,000 personnel. In October 2020, the Marine Corps Forces Space Command was newly created under the U.S. Marine Corps.

 See Chapter 2, Section 1-2 (Military Posture), p. 54

2 China

China began working on space development in the 1950s and launched its first satellite “Dong Fang Hong I” in 1970. Recently, in January 2019, China became the first country in the world to land an unmanned spacecraft (“Chang’e 4”) on the far side of the moon, and it successfully launched “Chang’e 5” in November 2020 and Mars explorer “Tianwen 1” in July 2020. Additionally, the country's constellation plan for around 13,000 communication satellites is pointed out, and in September 2020, China launched a satellite payload rocket “Long March 11” from a ship in the Yellow Sea, and the core module of the China Space Station (CSS)² in April 2021. In this manner, China has been increasing its space activities. It is speculated that such space development is intended to enhance national prestige and

² In May 2021, China announced that a fragment of the “Long March 5B” used for this launch had fallen in the Indian Ocean. In response, NASA released an Administrator Statement saying that “It is clear that China is failing to meet responsible standards regarding their space debris.”



Launch of the "Long March 11" from the Yellow Sea
[Jiji]

develop space resources.

In its 2019 defense white paper, released in July 2019 and titled "China's National Defense in the New Era," China asserts that outer space is a critical domain in international strategic competition and that outer space security provides strategic assurance for national and social development. In addition, the "14th five-year plan and long-range objectives to 2035" adopted at the National People's Congress held in March 2021 revealed a policy to accelerate the development of aerospace fields.

While traditionally emphasizing international cooperation and the peaceful use of space, China has not ruled out its military use of space and proactively used space for military purposes, including information collection, communications, and positioning through satellites. China continues to develop ASATs. In January 2007, China conducted a test using a ground-launched missile for destroying its own satellite. In July 2014, China implemented an anti-satellite missile test³ without actually destroying any satellite. It is also suggested that China is developing killer satellites, jammers, and directed-energy weapons,⁴ including laser beams. It is pointed out that the BeiDou satellite positioning system, for which the launch of all satellites comprising the system was completed in June 2020, could be used for military purposes. A Chinese state-owned corporation, which develops and produces launch vehicles, has claimed to continue the launch of new rockets in the Long March series and develop a launch vehicle that can carry a large satellite. However, the corporation has been

reported to have been developing and producing ballistic missiles as well, indicating that the technology used in the development of satellite launch vehicles is applicable to the development of ballistic missiles.

China is thus expected to focus on space development through close cooperation between government, military, and private sectors. China is considered to have become one of the space powers through investments, research and development, and the introduction of technologies from the United States and other countries. It has been suggested that China could threaten U.S. superiority in outer space in the future.⁵

The Strategic Support Force, established in December 2015 as a force under direct control by the Central Military Commission, is considered to be in charge of outer space, cyber, and electronic warfare missions, including the launching and tracking of satellites, although the details of its missions and organization have not been published. The Equipment Development Department of the Central Military Commission is believed to be in charge of crewed space programs.

3 Russia

Russia's space activities have been continuing since the former Soviet Union era. The former Soviet Union successively launched multiple satellites and had the largest number of launched satellites in the world until the collapse of the Soviet Union. Russia's space activities have declined since the former Soviet Union collapsed in 1991. In recent years, however, the country has restarted these activities and is reinvigorating space development, including the plan for the "Sfera" concept integrating 600 satellites for observation, meteorology, communications and positioning by 2030.

Regarding the country's trends in security, in response to the United States' release of the annual MDR in 2018, Russia expressed concern that the implementation of plans in the MDR would trigger an arms race in space with hugely negative consequences for world peace and stability.

In March 2016, Russia released the Federal Space Program for 2016-2025 as a specific future guideline for space activities, including the development and deployment of domestic space satellites and crewed flight programs.

Meanwhile, Russia has used its outer space capabilities for military operations in Syria. Russian Minister of Defense Shoigu revealed at a meeting of the Ministry of Defence in 2019 that he has become aware of the

³ According to "Worldwide Threat Assessment," the U.S. Director of National Intelligence (February 2015)

⁴ According to the "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China," U.S. DoD (May 2019)

⁵ According to the annual report of the U.S.-China Economic and Security Review Commission (November 2015)

need to rebuild the country's military satellites based on this tactical experience. It is also noted that Russia has continued ASAT development, repeated tests to fire ground-launched anti-satellite missiles, and has been developing anti-satellite missiles launched from MiG-31 fighter jets, as well as laser weapon systems, such as the Sokol Eshelon system for aircraft.

From an organizational perspective, State Space Corporation ROSCOSMOS is in charge of space activities related to Russia's scientific and economic areas, while the Russian Ministry of Defence is involved in space activities for security purposes. The Russian Aerospace Forces, into which the Air Force and the Aerospace Defence Forces were integrated in August 2015, conduct actual space activities for military purposes and manage facilities for launching satellites.

4 Europe

Regarding European outer space activities, the EU, the European Space Agency (ESA), and European countries are promoting their own unique space activities and are cooperating with each other to implement space activities.

In September 2019, before taking office as President of the European Commission, Ursula von der Leyen stated she would establish a defense and space branch to take charge of military fundraising, development and deployment within the commission. A satellite positioning system called "Galileo" and an Earth observation program named "Copernicus" under planning by the EU and ESA, and a reconnaissance satellite project called "Multinational Space-based Imaging System (MUSIS)" of the European Defense Agency (EDA) are expected to be utilized for the security field in Europe.

Also, in June 2019, NATO approved a space strategy forming the guidelines for NATO's approach to space. In December the same year, at the NATO leaders' summit, space was declared as the "fifth tactical domain" next to land, sea, air and cyberspace. This shows NATO's awareness concerning the importance of security in the space domain. In October 2020, the NATO Defense Ministers Meeting was held, where an agreement was reached to establish a new space center in Ramstein, Germany.

The United Kingdom, which exited the EU at the end of 2020, announced in January 2021 that it would not participate in the Galileo Program. Additionally, the United Kingdom created the Space Command under the Royal Air Force, and it plans to launch its own satellite aboard its own rocket from Scotland in 2022. It is now moving ahead with active investment in the space field, including creation of a new national testing facility to test a cutting-edge space propulsion engine initiated at

the start of 2021.

In July 2019, France released the Space Defence Strategy as its first document specialized in space defense. The document referred to the creation of a space command and the enhancement of threat identification and space situation surveillance capabilities. In September 2019, France created the space command under the Air Force to integrate functions and personnel of a military space surveillance operation center, a joint space command and a military satellite surveillance center within the Armed Forces Ministry. Also, in July 2020, the country changed the name of the Air Force to the Air and Space Force, adding activities for guaranteeing freedom of behavior in space and free access to space within the operations of the Air Force.

5 India

India has promoted programs to develop communications, positioning and observation satellites. At their second meeting of their foreign and defense ministers in October 2020, the United States and India stated their intentions to continue discussing defense cooperation in outer space.

India is believed to have operated the Navigation Indian Constellation (NavIC) satellite as a positioning satellite that can position locations around India. In February 2017, India successfully launched a satellite launch vehicle loaded with 104 satellites at low cost, which indicates its high technological capabilities. In March 2019, Prime Minister Modi announced that the country successfully tested a missile to destroy a low-orbit satellite.

Among organizations, the Space Agency oversees the Indian Space Research Organization (ISRO), which implements space development policy, develops and launches launch vehicles, and develops and manufactures satellites. It has been reported that the Ministry of Defence approved the creation of the Defence Space Agency (DSA) to control ASATs and other space assets, and to plan defense policies regarding outer space in April 2019. The ministry also approved the establishment of the Defence Space Research Agency (DSRA) to develop weapons and technology for outer space warfare in June 2019.

6 The ROK

The ROK's space development is promoted based on the Third Basic Space Development Promotion Plan announced by the Moon administration under the Space Development Promotion Act implemented in 2005. The plan proposes a vision towards 2040, giving priority to (1) the establishment of its own launch vehicle

technology, (2) the advancement of satellite-using services and satellite development, (3) the initiation of space exploration, and (4) the development of the Korean Positioning System (KPS). In July 2020, SpaceX of the United States successfully launched the ROK's military geosynchronous communications satellite.

Among organizations, the Korea Aerospace Research Institute leads research and development as an implementation agency. Furthermore, the Korea Agency for Defense Development is engaged in the development

and use of various satellites. Also, to secure space surveillance capabilities above the Korean Peninsula, the country created the Air Force Satellite Surveillance and Control Unit, the country's first space force, in 2019. The name of this force was changed to the Air Force Space Operation Unit in 2020.

The ROK's Ministry of National Defense says it plans to secure surveillance, reconnaissance, and early warning satellites in order to strengthen space related capabilities.⁶

⁶ According to the ROK Defense White Paper 2020 (February 2021)

Section 3

Trends in Cyber Domain

1 Cyberspace and Security

Owing to the advancement of information and communications technology (ICT) in recent years, information and communications networks such as the Internet have become essential components across all facets of life. Therefore, cyber attacks against information and communications networks have the potential to seriously impact the lives of individuals.

Types of cyber attacks include functional disruption, data falsification and data theft caused by unauthorized access to information and communications networks or through the transmission of viruses via e-mail, functional impairment of the networks through simultaneous transmission of large quantities of data, and attacks intended to shut down or take over a system belonging to critical infrastructure, such as power systems. Also, network-related technologies are constantly evolving, with cyber attacks becoming more and more advanced and sophisticated by the day.

For military forces, information and communications capability form the foundation of command and control, which extend from central command to

ground-level forces. In this regard, ICT advancements are further increasing the dependence of military forces on information and communications networks. Furthermore, in some cases, military forces need various critical infrastructures, including electricity, to execute their missions. Accordingly, cyber attacks against such critical infrastructures could become a major impediment to their missions. For this reason, cyber attacks are recognized as an asymmetrical means to impede the military activities of adversaries at low cost. It is believed that many foreign military forces are developing offensive capabilities in cyberspace. It has been pointed out that China and Russia in particular are bolstering the offensive cyber capabilities of their militaries for the purpose of obstructing the networking of adversaries' military forces and destroying their infrastructure.¹ Considering this situation, the United States, deeming the use of foreign-made equipment in the ICT supply chain and bulk-power system as a threat to national security, issued Executive Orders in May 2019 and May 2020 restricting such use.

2 Threats in Cyberspace

Cyber attacks have frequently been carried out against information and communications networks of not only government organizations and military forces but also business corporations and academic organizations in various countries. Attacks attempting to steal critical technologies, secrets or personal information have been confirmed. For example, advanced persistent threat (APT) and other relentless cyber attacks focusing on specific bodies require abundant resources, arrangements and capabilities, being viewed as organized activities. To respond to such advanced cyber attacks, Japan is required to share threat awareness with foreign countries for technological and operational cooperation. The United States has assessed that China, Russia, Iran and North Korea have been conducting increasingly diverse and aggressive cyber attacks,² indicating that their military forces have enhanced their offensive cyber capabilities.

1 China

It has been alleged that cyber warfare units have been formed under the Strategic Support Force that was created as part of China's military reforms in late December 2015. The units are estimated to consist of 175,000 troops, including 30,000 for cyber attacks. In its "National Cyberspace Security Strategy" published in 2016, China recognized sovereignty in cyberspace as an important component part of national sovereignty. Its 2019 defense white paper, released in July 2019 and titled "China's National Defense in the New Era," stated that China's armed forces are accelerating the building of their cyberspace capabilities. Given the above, China is believed to have been enhancing its military's cyber warfare capabilities.

 See Chapter 2, Section 2-2-5 (Military Posture), p. 61

¹ According to "Worldwide Threat Assessment," Director of National Intelligence (March 2018)

² According to "Worldwide Threat Assessment," Director of National Intelligence (January 2019)

China is suspected of conducting cyber attacks and other activities to steal confidential information even in peacetime.³ For example, its involvement in the following incidents has been pointed out.

- In January and February 2018, Chinese government hackers hacked a U.S. Navy contractor, leading to a leak of classified information on supersonic anti-ship missiles mounted on submarines.
- In December 2018, such countries as the United States announced that the APT10 cyber group related to China's Ministry of National Security conducted cyber attacks on intellectual and other properties in at least 12 countries.
- In Japan, it has been confirmed that the APT10 group conducted extensive cyber attacks on private enterprises, academic organizations and other targets.
- In 2017, a U.S. consumer credit information company came under a cyber attack stealing personal information including names, birthdates, social security numbers, driver's license numbers, and credit card numbers. In February 2020, the U.S. Department of Justice prosecuted four Chinese military-related persons for their alleged involvement in the cyber attack.
- In July 2020, the U.S. Department of Justice prosecuted two individuals who were alleged to be related to China's Ministry of State Security for launching a cyber attack aimed at stealing intellectual property and trade secrets from private companies, including companies involved in the development of vaccines for COVID-19.
- In April 2021, the investigating authorities of Japan concluded that the series of cyber attacks against around 200 domestic companies were launched by the cyber group Tick, and that there was a high probability that a unit of the People's Liberation Army was involved in the attack behind the group.

2 Russia

It has been pointed out that the Main Intelligence Directorate of the General Staff of the Russian Armed Forces (GRU) and the Federal Security Service of the Russian Federation (FSB) are involved in cyber attacks. It has also been revealed that the Russian military has its own cyber command unit,⁴ which is believed to be responsible for conducting offensive cyber activities, including inserting malware into command and control

systems of adversaries,⁵ with approximately 1,000 personnel. Russia's "Doctrine of Information Security," released in December 2016, acknowledged an increase in threats related to the use of information technology for military and political purposes. In November 2019, Russia enforced the so-called sovereign Internet law to secure the continuity of Russian networks by shutting them out from global networks in the event of an incident like a cyber attack.

It is pointed out that Russia has taken advantage of cyberspace for intelligence operations not only to steal information and conduct sabotage operations but also to challenge democratic processes⁶ and has been involved in the following incidents:

- In June 2017, cyber attacks using the so-called NotPetya ransomware occurred in Ukraine and other countries. In February 2018, the U.S. and U.K. governments attributed the attacks to the Russian military.
- In February 2020, U.S., U.K., Georgian and other governments announced that the GRU was responsible for large-scale cyber attacks on Georgian government agencies and media organizations in October 2019.⁷
- In October 2020, the U.S. Department of Justice announced the prosecution of six officers of the GRU for being involved in cyber attacks on the Ukrainian power networks in 2015 and 2016 and cyber activities against the Pyeongchang Olympics in 2017 and 2018. Moreover, the U.K. supported the announcement by the U.S. and announced that Russia had conducted cyber reconnaissance on organizations related to the Tokyo Olympics and Paralympics in 2020.
- In December 2020, it became clear that U.S. government agencies had been exposed to cyber espionage over a long period of time. In relation to this case, the U.S. government asserted in January 2021 that the target of this attack was to collect information, and in April 2021, the governments of the U.S. and U.K. announced the attack was by the Foreign Intelligence Service (SVR).
- In April 2021, the U.S. Government sanctioned 32 entities and individuals who carried out attempts led by the Russian Government to influence the 2020 U.S. presidential election, and other information falsification and interference.

³ According to "Cyber Strategy," U.S. DoD (September 2018)

⁴ According to a statement made by Russian Minister of Defence Shoigu during a briefing for the lower house in February 2017, that the Russian military has a cyber command for countering political propaganda in Russia's ongoing information war with Western countries. However, the minister fell short of naming the command.

⁵ According to then U.S. Director of National Intelligence Clapper's written testimony on "Worldwide Cyber Threats" at the House Permanent Select Committee on Intelligence in September 2015

⁶ According to the "Cyber Strategy," U.S. DoD (September 2018)

⁷ According to a U.S. Department of Justice announcement in February 2020

3 North Korea

It has been pointed out that the North Korean authority trains hackers⁸ and has intensively built up cyber units operating some 6,800 personnel.⁹ In September 2019, the U.S. Department of the Treasury announced sanctions targeting three cyber groups, including Lazarus Group,¹⁰ supported by the North Korean authority responsible for their involvement in malicious cyber activities targeting key infrastructure.

North Korea is alleged to have been developing capabilities to steal money and secret military information through cyber attacks, as well as developing attack capabilities against key foreign critical infrastructure through cyber attacks. It is suspected of having been involved in the following incidents.

- In May 2017, a cyber attack used a malware called WannaCry to encrypt and neutralize electronic data held by hospitals, schools, businesses, and other entities in more than 150 countries. Japan, the United States, the United Kingdom, Australia, Canada, and New Zealand announced a statement blaming North Korea for its involvement in the attack. It was pointed out that this cyber attack succeeded in collecting 140,000 dollars in Bitcoins.
- In September 2017, multiple U.S. electric power utilities were inflicted with cyber attacks using spear phishing emails. In October 2017, FireEye, a U.S. cybersecurity company, announced that the attacks had been conducted by a cyber threat group allegedly affiliated with North Korea.
- In February 2021, the U.S. Department of Justice prosecuted three North Koreans working under the North Korean Reconnaissance General Bureau on suspicion of involvement in a cyber attack.
- In the final report of the UN Security Council's Panel of Experts assisting the North Korea Sanctions Committee ("Final Report of the Panel of Experts submitted pursuant to resolution 2515 (2020)")

released in April 2021, the Panel evaluated continued attacks against financial institutions and virtual currency exchange houses as generating revenue to support the country's weapons of mass destruction and ballistic missile programs.

4 Trends Concerning Other Threats

Supply chain risks, including products embedded with deliberately and fraudulently altered programs, and the existence of advanced malware designed to attack industrial control systems are also pointed out. In this respect, the U.S. Congress in August 2018 passed the National Defense Authorization Act of 2019 including provisions prohibiting government agencies from using products of major Chinese communications equipment manufacturers, such as Huawei Technologies Co. The United States has provided its allies with information about risks accompanying Chinese communications equipment and urged them not to use such equipment. In response, Australia has banned China's Huawei and ZTE Corporation from taking part in its fifth-generation mobile communications system development project, while the United Kingdom has announced its policy to remove all Huawei products from its fifth-generation mobile communications system network by the end of 2027.

Moreover, in the midst of the turmoil caused by COVID-19, cyber attacks that steal information on vaccine and treatment research data from pharmaceutical companies and research institutions and exploit the vulnerability of remote work infrastructure are frequently occurring. In response to this situation, NATO issued a statement in June 2020 condemning malicious cyber activities against those involved in pandemic responses, including medical and research institutions.

⁸ According to the ROK's 2016 Defense White Paper (January 2017)


⁹ According to the ROK's 2018 Defense White Paper (January 2019)

¹⁰ In the private cybersecurity industry, the North Korean APT attack groups are known as Lazarus Group, Bluenoroff, and Andariel.

3 Initiatives against Cyberspace Threats

Given these growing threats in cyberspace, various initiatives are under way.

It is regarded that the international community has diverging views concerning the fundamental matters of cyberspace, including how international law applies. For instance, the United States, Europe, and Japan have called for maintaining a free cyberspace, while Russia, China, and most emerging countries sought to strengthen state control on cyberspace. Against this backdrop, there has been a movement to promote the rule of law in cyberspace in the international community. For instance, discussions are being held on the establishment of international rules within the framework of global conferences on cyberspace.

 See Part III, Chapter 1, Section 3-2 (Response in Cyber Domain), p. 283

1 The United States

In the United States, the Department of Homeland Security is responsible for protecting federal government networks and critical infrastructure against cyber attacks, and the Department's Cybersecurity Infrastructure Security Agency (CISA) works to protect the networks of government agencies. The National Defense Authorization Act for FY2021 clearly stated that the post of National Cyber Director will be established at the White House.

The U.S. NSS (December 2017) points out that many countries now view cyber capabilities as tools for projecting influence and that cyber attacks have become a key feature of modern conflict. It also notes that the United States would deter, defend, and when necessary defeat malicious actors who inflict cyber attacks on the United States. The U.S. DoD in its National Defense Strategy (January 2018) described a policy of investing in cyber defense, resilience, and the continued integration of cyber capabilities into the full spectrum of military operations. Furthermore, the DoD Cyber Strategy (September 2018) points out that the United States is engaged in a long-term strategic competition with China and Russia, and that China and Russia have expanded that competition to include persistent campaigns in and through cyberspace that pose long-term strategic risk to the United States as well as to its allies and partners.

In April 2019, at the U.S.-Japan Security Consultative Committee (2+2), the two countries agreed to enhance cooperation on cyber issues and affirmed that international law applies in cyberspace



Press briefing by Assistant Attorney General for National Security
[U.S. Department of Justice]

and that a cyber attack could, in certain circumstances, constitute an armed attack for the purposes of the U.S.-Japan Security Treaty.

The U.S. Forces include Cyber Command, which was elevated to a unified combatant command in May 2018 to control cyberspace operations. The Command consists of the Cyber Protection Force (68 teams), which operates and defends the DoD Information Network, the Cyber National Mission Force (13 teams), which supports the U.S. defense against national-state threats, and the Cyber Combat Mission Force (27 teams), which supports the operations conducted by unified combatant commands on the cyber front (these three Forces are collectively referred to as the Cyber Mission Force, consisting of 133 teams including 25 support teams, with approximately 6,200 personnel).

2 North Atlantic Treaty Organization (NATO) and European Union (EU)

At the NATO Summit in September 2014, an agreement was reached that NATO's collective defense applies to cyber attacks against member states.

On the organizational front, in November 2017, an agreement was reached on the creation of a new Cyber Operations Center and the integration of NATO member countries' cyber defense capabilities into NATO missions and operations. The Cyber Operations Center located in Belgium is expected to be fully operational with cyber attack capabilities by 2023. Furthermore, NATO has conducted cyber defense training exercises annually since 2008 to heighten cyber defense capabilities. In addition, NATO has expanded cooperation with the EU in the fields of cybersecurity and cyber defense.

In 2008, the NATO Cooperative Cyber Defence

Centre of Excellence (CCDCOE) was authorized to serve as a research and training institution, and was established in Estonia's capital of Tallinn. CCDCOE carries out research on the relationship between cyber activities and international law and published the "Tallinn Manual 2.0" in February 2017. The manual takes into consideration broad discussion points, from peacetime legal regimes, such as laws on state responsibility, human rights, aviation, space, and maritime affairs, to contingency legal regimes, such as laws on armed conflicts. In December 2019, NATO held its "Cyber Coalition 2019" exercise, in which Japan officially participated for the first time in addition to 27 NATO member countries and the EU. In April 2021, Japan also officially participated for the first time in Locked Shields 2021, a cyber defense exercise hosted by the CCDCOE.

The EU announced its decision to sanction six individuals of Chinese and Russian nationality and three organizations from China, North Korea, and Russia that launched cyber attacks within Europe in July 2020. In addition, it made a joint announcement with the United Kingdom in October that it would impose sanctions on Russia for cyber attacks on the German parliament building. In December 2020, the EU pointed out the lack of collective situational awareness on cyber threats within the region, and advocated for the establishment of a cross-disciplinary Joint Cyber Unit between the private, diplomatic, police and defense sectors in the EU's Cybersecurity Strategy in the Digital Decade.

3 The United Kingdom

The United Kingdom, in its "National Security Strategy and Strategic Defence and Security Review (NSS-SDSR2015)" released in November 2015, committed to investing £1.9 billion over the next five years in increasing its cyber defense capabilities to strengthen the functions for identifying and analyzing cyberspace threats. In November 2016, the country announced a new "Cyber Security Strategy" that presents a vision for the United Kingdom, which is to be secure and resilient to cyber threats, prosperous and confident in the digital world. To achieve this vision, the Strategy requires the United Kingdom to deter cyber threats by having effective defensive and offensive means and to "develop" cutting-edge technologies.

On the organizational front, in October 2016, the National Cyber Security Centre (NCSC) was newly established under the Government Communications Headquarters (GCHQ) to promote public-private partnerships for responses to national cyber incidents.

Moreover, the 13th Signal Regiment was established in June 2020 for the protection of military networks. In November 2020, the establishment of the National Cyber Force (NCF) was announced, which consolidates personnel from GCHQ, the Ministry of Defence, and others to carry out activities such as preventing serious crimes and disrupting adversary weapon systems.

4 Australia

In its first "National Security Strategy" published in January 2013, Australia positions integrated cyber policies and operations as one of the top national security priorities. In the Cyber Security Strategy announced in August 2020, Australia clearly states it will ensure not only its defense capabilities in cyberspace, but also its authority and technical strength of offensive capabilities in order to ensure the country's network safety.

On the organizational front, cybersecurity capabilities across the government were converged to establish the Australian Cyber Security Center (ACSC), which addresses major cybersecurity issues related to government agencies and critical infrastructure. In July 2015, the ACSC issued its first report on cybersecurity, which contends that the number, type, and sophistication of cyber threats to Australia are all increasing. Moreover, the Australian Defence Force created the Information Warfare Division under the Joint Capabilities Group in July 2017 and established the Defence Signals Intelligence and Cyber Command under the division in January 2018. In October 2019, the Royal Australian Air Force offered to recruit cyber skills officers to protect networks, data and information systems.

5 The ROK

In December 2018, the ROK released the "National Security Strategy of the Moon Jae-in Government," pledging to enhance cyber threat prevention and response capabilities based on cooperation among private, government and military sectors in responding to cyber threats and to activate relevant international cooperation. The ROK also formulated its first "National Cybersecurity Strategy" in April 2019 to protect the safety of the people and enhance national security, and released the "National Cybersecurity Basic Plan" to materialize the strategy in September 2019.

In terms of national defense, the ROK's military has established a structure to perform cyber operations led by the Joint Chiefs of Staff in 2019, while developing a

collaborative system between the Joint Chiefs of Staff, Cyber Operations Command, and each military branch in enhancing its cyber operations preparedness and ensuring effective response to threats in cyberspace. The Military Cyber Command was restructured into

the Cyber Operations Command in February 2019. In addition, the Cyber Protection Center of each military branch was restructured into the Cyber Operations Center with an increased number of personnel.¹¹

¹¹ According to the 2020 Defense White Paper published in February 2021

Section 4

Trends in Electromagnetic Domain

1 Electromagnetic Domain and Security

In everyday life, electromagnetic waves are used in various applications including in televisions, mobile communications, and global positioning systems. In the defense field, it is used for command and control communications equipment, radar systems for detecting enemies, missile guidance systems, and other equipment. Securing superiority in the electromagnetic domain is indispensable for modern operations. Activities using the electromagnetic domain include “electronic warfare” and “electromagnetic spectrum control.” Electronic warfare means or approaches are generally classified into three categories – electronic attack, electronic protection and electronic warfare support.

See Fig. I-3-4-1 (How to Use the Electromagnetic Domain in the Defense Field)

“Electronic attack” is to jam radio waves coming from adversary communications or radar equipment to reduce or neutralize the adversary communications and search capabilities by emitting strong radio waves or radio waves pretending to be those sent out by the adversary. It includes radio wave jamming, radio wave deception and physical destruction using high-power electronic waves (such as high-power lasers and high-power microwaves).

See Section 1-1-2 (2) (High-power Energy Technology), p. 170

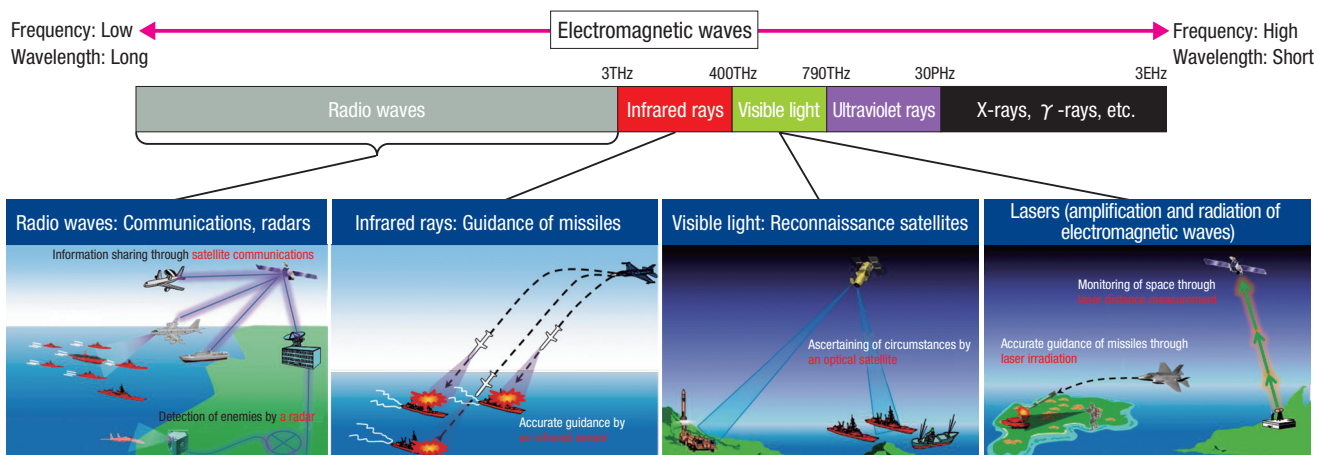
“Electronic protection” is to make it difficult to be detected by adversaries by improving invisibility of equipment, and to reduce or neutralize adversary electronic attacks on communications and radar equipment by changing electronic wave frequency for use or increasing its power.

“Electronic warfare support” consists of activities designed to collect information on adversary electromagnetic spectrum. It is necessary for effective electronic attacks or protection to detect and analyze what electromagnetic spectrum is usually used by adversaries for communications equipment, radar and electronic attack aircraft. It is desirable to be able to conduct electronic warfare effectively even when electromagnetic spectrum used by adversaries is not detected or analyzed in advance. For example, AI may be mounted on or used for equipment to immediately analyze jamming and automatically select frequency bands that are the most invulnerable to jamming.

“Electromagnetic spectrum control” means the control and adjustment of electromagnetic spectrum use to facilitate electromagnetic domain activities such as electronic attacks and protection. Specific measures for the control include the detection of how electromagnetic spectrum is used in a theater of operation, as well as the adjustment of frequencies, directions and durations of electromagnetic spectrum used for friendly forces and equipment to avoid electromagnetic spectrum interference. At present, research is being conducted on technologies for detecting and visualizing how electromagnetic spectrum is used.

Major countries apparently recognize electronic attacks as an asymmetric means similar to cyber attacks to effectively hamper adversaries’ military performance, emphasizing and enhancing electronic warfare capabilities, including electronic attacks.

Fig. I-3-4-1 How to Use the Electromagnetic Domain in the Defense Field



2 Each Country's Electronic Warfare Initiatives

1 The United States and Europe

The United States is committed to expanding electronic warfare training and equipment and to enhancing cooperation with its allies under an initiative to aggressively achieve its dominance in the electromagnetic domain. In addition, the Electromagnetic Spectrum Superiority Strategy announced by the U.S. Department of Defense in October 2020, indicates the recognition of importance to ensure freedom of action in the electromagnetic spectrum for the success of operations in all areas.

As an example of military operations using electronic warfare equipment, there is an assessment that U.S. electronic warfare units used EA-18G electronic warfare aircraft in Libya in 2011 to jam ground radar of the Libyan Government forces, preventing their attacks on NATO aircraft. It is pointed out that the LMADIS (Light Marine Air Defense System) counter unmanned aircraft system with electronic warfare capabilities was used for leading an Iranian drone to crash over the Strait of Hormuz in July 2019.

In the U.S. military organization, the Electro Magnetic Spectrum Operation Cross Functional Team was established under the Secretary of Defense in 2019, and in January of the same year, the army newly established the I2CEWS unit, which comprises a part of the Multi-Domain Task Force that integrates information, space, cyber, and electronic warfare missions. Moreover, the U.S. Air Force activated the 16th Air Force in October of the same year to integrate functions for ISR, cyber



Ceremony for the establishment of the I2CEWS Unit [U.S. Army]

warfare, electronic warfare and information operations.

Many other NATO member countries are also developing equipment for severe electronic warfare environments and allegedly conducting electronic warfare-oriented exercises with Russian forces' electronic warfare equipment in mind.¹

2 China

China has set an initiative to put cyber warfare and other electronic elements, and physical destruction and other non-electronic elements, under unified control.² Also, it has been pointed out that its electronic warfare strategy is focused on controlling, deteriorating, damaging, and deceiving enemy electronic equipment.³ Under the initiative, China conducts force-on-force exercises on a routine basis to effectively accomplish missions in complicated electromagnetic environments, improving practical capabilities. It is pointed out that China's armed forces have taken advantage of such exercises to assess electronic warfare weapon research and development achievements.⁴ The Strategic Support Force, established at the end of 2015 for improving overall military operational capabilities, is said to be responsible for such domains as electronic warfare, cyber and space.

China's TU-154 intelligence and Y-8 electronic warfare aircraft have been seen flying around the Nansei Islands and the Sea of Japan in the vicinity of Japan. It is also reported that China has mounted electronic warfare pods for jamming missions on J-15 fighters, H-6 bombers, and other aircraft, and deployed a jamming system on Mischief Reef of the Spratly Islands.⁵

3 Russia

Russia, in its Military Doctrine, positions electronic warfare equipment as important equipment in modern military conflict. It is noted that Russia used electronic warfare equipment in the "Vostok 2018" exercise in September 2018, the "Tsentr 2019" exercise in September 2019 and other exercises. It is also pointed out that Russian forces have positioned electronic warfare as part of offensive means and improved practical electronic warfare capabilities in recent years.⁶

In the Russian Forces, there are reportedly five

¹ According to "All quiet on the eastern front: EW in Russia's new-generation warfare," *Jane's International Defence Review* (April 2018)
² According to "The Military Balance 2019," U.K. International Institute for Strategic Studies
³ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2020)
⁴ According to the annual report "Military and Security Developments Involving the People's Republic of China," U.S. DoD (2019)
⁵ According to "An Accounting of China's Deployments to the Spratly Islands," Center for Strategic and International Studies (May 2018)
⁶ According to "Russia's Electronic Warfare Capabilities to 2025," Estonian Ministry of Defense

electronic warfare brigades. They mainly consist of the Land Forces⁷ and possess multiple types of electronic warfare equipment. It is reported that Russia used various electronic warfare systems in eastern Ukraine to block Ukrainian forces' command and control traffic and jam GPS waves to interrupt their drone operations, affecting Ukraine's military performance.⁸ It is also pointed out that Russia used Krasukha-4 and other electronic warfare

systems in Syria to interrupt NATO forces' command and control traffic and radar systems.⁹ In addition, the electronic warfare system Bylina, which is equipped with artificial intelligence and controls all the associated electronic warfare equipment, was used in the military exercise, Zapad 2017. In the vicinity of Japan, Russian electronic reconnaissance aircraft's long-range flights over the Sea of Japan have been seen.

⁷ According to "All quiet on the eastern front: EW in Russia's new-generation warfare," Jane's International Defence Review (April 2018)

⁸ According to "Russia's Electronic Warfare Capabilities to 2025," Estonian Ministry of Defense

⁹ According to "All quiet on the eastern front: EW in Russia's new-generation warfare," Jane's International Defence Review (April 2018)

Section 5

Maritime Trends

Japan is a maritime nation surrounded by sea and depends on maritime transportation for importing energy resources. In this sense, securing maritime traffic safety is vital for the nation's existence. At the same time, ensuring the stable use of the maritime domain as infrastructure supporting international logistics is recognized as a primary concern for the international community.

Nevertheless, some countries unilaterally claim their rights or take actions based on their own assertions that are incompatible with the existing international order, leading the principle of the freedom of the high seas to be violated unduly. Attacks on ships in the Middle East and piracy seen at various locations have become a threat to maritime traffic.

1 Trends Related to the "Principle of the Freedom of the High Seas"

The UN Convention on the Law of the Sea (UNCLOS)¹ provides for the principles of freedom of navigation in the high seas and freedom of overflight. Nevertheless, in the waters and airspace in the periphery of Japan, especially the East and South China Seas, it has become increasingly common for countries to unilaterally assert their rights or take actions, based on assertions which are incompatible with the existing laws and orders of the seas. This has caused situations of undue infringement upon such principles.

(1) East China Sea

Numerous cases of acts that go against the principles of freedom of navigation and freedom of overflight have been recently seen in the East China Sea. Japan is concerned about such cases since these are profoundly dangerous that could escalate the situation by unilaterally changing the status quo and may cause unintended consequences.

On November 23, 2013, for example, the Chinese Government announced that it would establish "the East China Sea Air Defense Identification Zone (ECS ADIZ)," including the Senkaku Islands as if they were a part of China's territory. China's Ministry of National Defense announced that it would require aircraft flying in the zone to follow their instructions and warned that China's armed forces would adopt "defensive emergency measures" in the event that aircraft refuse to follow the instructions. Japan is demanding China to revoke any measures that could go against the principle of freedom of overflight. The United States, the ROK, Australia, and the European Union (EU), too, have expressed concern about China's establishment of such a zone. Increased activities by Chinese military aircraft have been confirmed in recent years in the airspace close to the various southwestern islands of Japan, including the main island of Okinawa. The

expansion of these activities may be an attempt to enforce the ECS ADIZ. Moreover, fighters of the PLA flew abnormally close to aircraft of the Japanese Self-Defense Forces (SDF) and U.S. Forces, which were flying over the East China Sea.

Furthermore, in January 2013, a Chinese naval vessel directed a fire-control radar at a Maritime Self-Defense Force (MSDF) destroyer navigating on the high seas of the East China Sea on the 30. Moreover, it is believed that other Chinese naval vessel directed a fire-control radar at a helicopter mounted on an MSDF destroyer on the 19. Projecting fire-control radar is normally conducted prior to firing at a target and thus it is a dangerous act that may cause unintended consequences.

(2) South China Sea

In the South China Sea as well, there are acts to unilaterally change the status quo and advance its efforts to create a fait accompli, based on assertions which are incompatible with the existing laws and orders of the seas, that have frequently been seen along with its coercive, dangerous acts that could invite unintended consequences.

For example, China has gone ahead with land reclamation on seven features on a massive and rapid scale on the Spratly Islands since 2014. In July 2016, the "historical rights" asserted by China as the basis of the "nine dash line" were denied in the arbitration award between the Philippines and China and the illegality of China's reclamation activities was acknowledged. However, China has clearly stated its intention not to comply with the award and has continued the militarization of the features by developing military facilities such as batteries and various infrastructure that can be used for military purposes, such as runways, harbors, hangars and radar facilities. Moreover, in July and August 2016 after the arbitration award between the

¹ The UN Convention on the Law of the Sea (UNCLOS) was adopted as a comprehensive treaty on the law and order of the seas in 1982 and entered into force in 1994 (Japan concluded it in 1996).

Philippines and China was rendered, an H-6K bomber of the PLA Air Force (PLAAF) conducted combat air patrols in the airspace around Scarborough Shoal, with China's Ministry of National Defense announcing that it would conduct these patrols regularly from now on. This shows the PLA has been intensifying its operations in the South China Sea. Under these circumstances, a further increase in China's aerial presence in the area could lead to the establishment of a "South China Sea Air Defense Identification Zone" in the future.

Furthermore, China is using methods other than its military. For example, the China Coast Guard has obstructed fishing and other vessels of other countries approaching the features by firing warning shots and water cannons at the vessels. In addition, in April 2020, China unilaterally announced the new establishment of administrative districts called "Xisha District" and "Nansha District" under Sansha City, Hainan Province.

In a dangerous act that could cause unintended consequences, PLA Navy and other ships approached and obstructed a U.S. Navy ship sailing in the South China Sea in September 2018.

In response to these actions by China, critical voices are being raised by others besides claimants. For example, in July 2020 the United States issued a statement from the U.S. Secretary of State saying that China's maritime claims in the South China Sea are unlawful.

(3) Unintended Contingency Avoidance Initiatives

Despite these numerous acts that could pose risks to securing the stable use of oceans and airspace, in recent years progress has been made in efforts to avert and prevent unintended consequences in the seas and skies.

2 National Maritime Security Initiatives

(1) Maritime Security in the Middle East

The Middle East has seen intermittent attacks on ships in recent years.

Since a coalition force led by Saudi Arabia launched bombing campaigns against the Houthis in Yemen in 2015, sporadic attacks on military and commercial ships have been seen in waters such as those off Yemen and the Strait of Babel-Mandeb.

In the Strait of Hormuz and its vicinity, attacks on private sector oil tankers have been seen since May 2019. As tensions including those over U.S.-Iran relations have increased in the Middle East, U.S. and French initiatives have been launched to secure safe navigation.

First, at the Japan-China summit meeting held on May 9, 2018, Japan and China agreed to establish a "Maritime and Aerial Communication Mechanism between the Defense Authorities of Japan and China" with the aim of avoiding unintended confrontations between the naval vessels and aircraft of the SDF and PLA. The mechanism went into operation in June of the same year.

As for multi-national initiatives, in April 2014, navies of participating countries of the Western Pacific Naval Symposium (WPNS), including Japan, the United States, and China, adopted the Code for Unplanned Encounters at Sea (CUES).² CUES sets forth a code of conduct such as procedures and communication method to ensure safety for unexpected encounters by vessels or aircraft of the navies of these countries. In November 2014, the United States and China agreed on measures pertaining to mutual notification of military activities, together with rules of behavior to avert collisions in waters and airspace in accordance with CUES and other frameworks. In September 2015, the two countries announced an agreement concerning an additional annex stipulating rules of behavior to avert air encounters. Between ASEAN and China, official discussions have been held for the establishment of the Code of the Conduct of Parties in the South China Sea (COC).

It is strongly hoped that these initiatives designed to avert and prevent unintended consequences in the seas and skies will supplement the existing international order and that the countries concerned, including China, refrain from unilateral actions that add to tension and act on the basis of the principle of the rule of law.

 Chapter 2, Section 10-2 (Situation in the Gulf Region), p. 159

(2) Piracy

Piracy seen at various locations has become a threat to maritime traffic. The number of maritime piracy and armed robbery incidents (hereinafter referred to as piracy incidents) in the world³ came to a peak of 445 in 2010, followed by 439 in 2011, and 297 in 2012, indicating a downtrend (the number stood at 195 in 2020). The decline has depended heavily on the fall in the number of piracy incidents in waters off the coast of Somalia and in the Gulf of Aden.

The number of piracy incidents in waters off the

² This code is not legally binding and does not supersede the annexes of the Convention on International Civil Aviation and other international treaties.

³ The numbers of piracy incidents cited in the main text are based on a report by the International Maritime Bureau of the International Chamber of Commerce.

coast of Somalia and in the Gulf of Aden rose rapidly from 2008 to 218 in 2009, 219 in 2010, and 237 in 2011, following a persistent uptrend, accounting for more than half of the global total and attracting great international concern as a threat to safe navigation. In the recent years, however, the number of piracy incidents in waters off the coast of Somalia and in the Gulf of Aden has remained low as a result of various initiatives taken by the international community including Japan (the number stood at zero in 2020; see Part III, Chapter 3, Section 2-2 [Counter-Piracy Operations] P. 391 for Japan's initiatives).

The international counterpiracy initiatives in waters off the coast of Somalia and in the Gulf of Aden include counterpiracy operations by the Combined Task Force 151 (CTF151), a multinational force that was created in January 2009 by the U.S. Force-led Combined Maritime Force (CMF)⁴ based in Bahrain. So far, the United States, Australia, the United Kingdom, Turkey, the ROK, Pakistan and other countries have participated in the CTF151, conducting zone defense operations to counter piracy. The EU for its part has conducted Operation Atalanta to counter piracy since December 2008. In the operation, naval vessels and aircraft dispatched by EU member countries escort ships and monitor the waters off the coast of Somalia. It has been decided that the operation will continue until the end of 2022.

In addition, some countries have conducted their exclusive operations outside the abovementioned frameworks. Since December 2008, for example, China has deployed naval vessels for counterpiracy operations

in waters off the coast of Somalia and in the Gulf of Aden.

While the number of piracy incidents in waters off the coast of Somalia and in the Gulf of Aden has remained low thanks primarily to such international initiatives, Somalia's unstable security and poverty as fundamental factors behind piracy have not been resolved.

Meanwhile, in Africa, piracy incidents occurred in the Gulf of Guinea (the number of incidents was 84 in 2020). The international community has continued counterpiracy initiatives in this region.

The number of piracy incidents in Southeast Asian waters came to 62 in 2020. Traditionally, maritime armed robbery incidents, including the theft of cash, crewmembers' belongings, ship equipment and other items, have accounted for most of piracy incidents in the waters. In recent years, however, they included grave incidents in which crewmembers were kidnapped for ransom purposes in the Sulu Sea and the Celebes Sea off the Philippines.

Counterpiracy measures in Asia include international information sharing and cooperation based on the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP),⁵ which was worked out at Japan's initiative and put into force in 2006. In addition, Indonesia, Malaysia, Singapore, and Thailand conduct the Malacca Strait Patrols.⁶ The cases of abduction for ransom have been confirmed in the Sulu Sea and the Celebes Sea. In order to respond to this, Indonesia, Malaysia and the Philippines began sea patrols in the area in June 2017 and air patrols in October of the same year.

⁴ The CMF is a multinational force, which operates to promote maritime security, stability, and prosperity, under the U.S. Central Command. Forces from 32 countries participate in the CMF, and the Commander of the U.S. Fifth Fleet concurrently serves as the CMF Commander. The CMF is comprised of three combined task forces: Combined Task Force 150 (CTF-150), which is tasked with maritime security operations; Combined Task Force 151 (CTF-151) with counter-piracy operations; and Combined Task Force 152 (CTF-152) with maritime security operations in the Persian Gulf. The SDF deploy units to CTF-151.

⁵ The contracting parties to ReCAAP are the following 20 countries: Australia; Bangladesh; Brunei; Cambodia; China; Denmark; India; Japan; the ROK; Laos; Myanmar; the Netherlands; Norway; the Philippines; Singapore; Sri Lanka; Thailand; the United Kingdom; the United States; and Vietnam.

⁶ The Malacca Strait Patrols are comprised of: the Malacca Strait Sea Patrols, which commenced in 2004; aircraft patrol activities, which commenced in 2005; and information sharing activities, which commenced in 2006.

3 Trends in the Arctic Ocean

The area north of latitude 66 degrees 33 minutes is called the Arctic Region. The Arctic Region includes Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States. These eight are called Arctic countries. In 1996, the Arctic countries established the Arctic Council to promote cooperation in their common challenges, including sustainable development and environmental protection in the Arctic Region.

In recent years, moves towards the utilization of trans-Arctic navigation routes and the development of natural resources in the Arctic Ocean have gained momentum in line with a decline in sea ice. From the perspective of security, the Arctic Ocean has traditionally been used for the deployment of strategic nuclear forces and as their transit route. With the decrease in sea ice in recent years, ships have been able to navigate for a longer period of time and more extensively than before. It is therefore considered that the region could be used for deploying maritime forces or maneuvering military forces in the future. In this situation, moves to deploy new military capabilities in the ocean are seen.

In the Russian Federation's National Security Strategy, revised in December 2015, Russia continues to maintain that it would secure its interests in resource development and use of the sea route.

Russia has been developing natural gas on the Yamal Peninsula. In 2018, liquefied natural gas produced on the peninsula was transported to China for the first time via an Arctic Ocean route. As for military arrangements, in January 2021, Russia upgraded the Northern Fleet to a military-administered district citing that it will enable the enhancement of joint operations in the Arctic. In the Arctic Region, Russia is constructing 10 airfields. As for military operations, the Northern Fleet has annually conducted a long-distance navigation to the Novo Sibirski Islands since 2012. Russia has intensified other Arctic military operations including SSBN submarines' strategic nuclear deterrence patrols and long-range

bombers' patrol flights.

In its Arctic Strategy published in June 2019, the U.S. DoD expressed concern against actions of China and Russia in the Arctic region⁷ and a desire for the Arctic to become a secure and stable region where U.S. national interests are safeguarded, the U.S. homeland is protected, and nations work cooperatively to address challenges.⁸ The U.S. Marine forces were deployed in Norway on a rotation basis every year for a period of six months for training since 2017, but this rotation deployment has been changed to a form of dispatching forces with a larger number of personnel for a shorter period of time in conjunction with training since October 2020. In October 2018, the U.S. sent an aircraft carrier to the Arctic Region for the first time in 27 years for air drills in the Norwegian Sea ahead of the NATO exercise "Trident Juncture 2018." In May 2020, United States and United Kingdom vessels took part in activities in the Barents Sea for the first time since the end of the Cold War. In December 2016, then U.S. President Obama decided to ban new drilling for oil and natural gas in a majority of U.S. territorial waters in the Arctic to protect marine resources, showing a negative stance towards resource development. However, U.S. President Trump signed an executive order repealing this decision of then U.S. President Obama in April 2017.

Aside from coastal states in the Arctic Ocean, 13 countries including Japan, China, the ROK, the United Kingdom, Germany and France, have observer status in the Arctic Council. Notably, China has shown active involvement in the Arctic Ocean, deploying the polar research vessel Xue Long to the Arctic Ocean for 10 times since 1999.⁹ In January 2018, they published a white paper titled "China's Arctic Policy" in which they claimed to be one of the geographically closest states to the Arctic Circle with rights pertaining to the development of resources. They also announced their intention to build a "Polar Silk Road." In September 2015, it was reported for the first time that

⁷ As for Russia, the U.S. DoD pointed out in its Arctic Strategy that Russia is strengthening its presence above the Arctic Circle by deploying Arctic units and establishing new military bases. Moreover, Russia has reportedly threatened to use force against vessels that fail to abide by Russian regulations. The DoD pointed out that Russia could utilize its military capabilities in an effort to deny access to disputed Arctic waters or resources. As for China, the DoD pointed out in its strategy that its operations of icebreaking vessels and civilian research activities could support a future Chinese military presence in the Arctic Ocean including deployment of submarines to the region, and also pointed out that it was attempting to gain a role in the Arctic in ways that may undermine international rules and norms, and there is a risk that its predatory economic behavior globally may be repeated in the Arctic. In May 2019, during his visit to Finland, Secretary of State Pompeo made a speech concerning Arctic policy, in which he stated that all relevant parties should follow the same rules and expressed caution against efforts by China and Russia to expand into the Arctic region.

⁸ In August 2019, then U.S. President Trump stated that buying Denmark's autonomous territory Greenland was "strategically interesting." In response, Danish Prime Minister Mette Frederiksen described the Trump statement as "absurd" and the Greenland Government issued a statement noting that Greenland was not for sale. Then President Trump countered that he would postpone his visit to Denmark as the prime minister was not willing to discuss any Greenland deal.

⁹ In 2012, Xue Long became the first polar research vessel to sail across the Arctic Ocean. In 2013, the cargo freighter Yong Sheng became the first Chinese commercial ship to cross the Arctic Ocean. Canadian scientists took part in Xue Long's voyage to the Arctic Ocean in 2017, and they succeeded for the first time in trial navigation of the Arctic Northwest Passage (along the north coast of Canada). China launched its second polar research vessel named Xue Long 2 in 2018.

five Chinese naval vessels sailed in the Bering Sea between the Arctic Ocean and the Pacific and sailed in the U.S. territorial waters near the Aleutian Islands.

The PLA Navy's future moves in the Arctic Ocean will attract attention.

Section 6

Transfer and Proliferation of Weapons of Mass Destruction (WMDs)

The transfer and proliferation of WMDs, such as nuclear, biological and chemical (NBC) weapons, and ballistic missiles that deliver such weapons, have been recognized as a significant threat since the end of the

Cold War. In particular, there still remain strong concerns that non-state actors, including terrorists, against which traditional deterrence works less effectively, could acquire and use WMDs.

1 Nuclear Weapons

During the Cold War, the Cuban Missile Crisis of 1962 raised awareness of the danger of a full-scale nuclear war between the United States and the Soviet Union. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) that took effect in 1970 prohibited countries, other than those that exploded a nuclear weapon or other nuclear explosive device in or before 1966 (the United States, the then Soviet Union, the United Kingdom, as well as France and China, which acceded to the NPT in 1992), from having nuclear weapons, and provided that arms control and disarmament of nuclear forces would be pursued through two-way negotiations.

As of January 2021, the NPT had been signed by 191 countries and regions. While some countries that had previously possessed nuclear weapons became

signatories to this treaty as non-nuclear weapon states by abandoning these weapons, India, Israel, and Pakistan still refuse to accede to this treaty as non-nuclear weapon states. Meanwhile, North Korea has conducted six nuclear tests and declared the development and possession of nuclear weapons.

The U.S.-Russia New Strategic Arms Reduction Treaty was set to expire in February 2021, but ahead of this both countries agreed to extend the treaty for five years.

The United States has indicated its hope to pursue an arms control framework including China. However, China, which is deemed to have increased its inventory of nuclear warheads as well as developed and deployed their means of delivery¹ and continued to enhance the capability of its nuclear force, has reiterated that

Fig. I-3-6-1 Number of Nuclear Warheads Arsenals and Their Major Means of Delivery by Country

		United States		Russia		United Kingdom		France		China	
Missiles	ICBM (Intercontinental Ballistic Missiles)	400	400	283	46	—	—	94	20	56	18
		Minuteman III		SS-18	24			DF-5 (CSS-4)		DF-31 (CSS-10)	DF-41
				SS-19	18						
				SS-25	78						
				SS-27 (single-warhead)	117						
				SS-27 (multi-warhead)							
	IRBM MRBM	—	—	—	—	—	—	—	—	254	10
										DF-4 (CSS-3)	110
										DF-26	134
										DF-21 (CSS-5)	
	SLBM (Submarine Launched Ballistic Missiles)	280	280	160	16	48	48	64	64	72	72
		Trident D-5		SS-N-18	96	Trident D-5		M-51		JL-2 (CSS-NX-14)	
				SS-N-23	48						
				SS-N-32							
	Submarines equipped with nuclear ballistic missiles		14		11		4		4		6
	Aircraft	66	20	76	60	—	—	40	40	104	100
		B-2	46	Tu-95 (Bear)	16			Rafale		H-6K	4
		B-52		Tu-160 (Blackjack)						H-6N	
	Number of warheads	Approx. 3,800		Approx. 4,315 (including Approx. 1,875 tactical nuclear warheads)		195-215		290		Approx. 320	

Notes: 1. Data is based on "The Military Balance 2021," the SIPRI Yearbook 2020, etc.

2. In March 2021, the United States released the following figures based on the new Strategic Arms Reduction Treaty between the United States and Russia as of March 1, 2021: the number of deployed strategic nuclear warheads for the United States was 1,357 and the delivery vehicles involved 651 missiles/aircraft; the number of deployed strategic nuclear warheads for Russia was 1,456 and the delivery vehicles involved 517 missiles/aircraft. However, according to the SIPRI Yearbook 2020, as of January 2020, the number of deployed U.S. nuclear warheads was approx. 1,750 (including 150 tactical nuclear warheads) and that of Russian ones was approx. 1,570.


3. The Integrated Review by the UK in March 2021 stipulated that the UK will move to an overall nuclear weapon stockpile of no more than 260 warheads.

4. According to the SIPRI Yearbook 2020, India possesses 150 nuclear warheads, Pakistan 160, Israel 90, and North Korea 30-40.

¹ See Chapter 2, Section 2-2 for China's ballistic missile development

it has no intention to participate in any U.S.-Russian arms control framework. In the future, it may be important to launch some international arms control and disarmament initiative including not only the United States and Russia but also China and others. Future

trends regarding nuclear arms control and disarmament should be closely watched.

 See Fig. I-3-6-1 (Number of Nuclear Warheads Arsenals and Their Major Means of Delivery by Country)

2 Biological and Chemical Weapons

Biological and chemical weapons are easy to manufacture at relatively low cost and are easy to disguise as most materials, equipment, and technology needed to manufacture these weapons can be used for both military and civilian purposes. These weapons are attractive to states and non-state actors, such as terrorists, seeking asymmetric means of attack.²

Biological weapons have the following characteristics: (1) manufacturing is easy and inexpensive; (2) there is usually an incubation period of a few days between exposure and onset; (3) their use is hard to detect; (4) even the threat of use can create great psychological effects; and (5) they can cause mass casualties and injuries depending on the circumstances of use and the type of weapon. As has been pointed out, advancements in life science could be misused or abused for the development

of biological weapons.

The United States, the United Kingdom, and France launched missile strikes on chemical weapons-related facilities in Syria in April 2018, determining that its Assad regime had used chemical weapons in Eastern Ghouta.³ North Korea is an example of an actor that is still presumed to possess these chemical weapons and has not entered into the Chemical Weapons Convention (CWC). In addition, such incidents as the Tokyo subway sarin attack in 1995 showed that the threat of the use of WMDs by terrorists is real and that these weapons could cause serious damage if used in cities. It is alleged that the “Novichok group,” a substance developed by Russia, had been used for an attack on a former Russian intelligence agent in the United Kingdom in March 2018 and the attempted poisoning of a Russian opposition leader in August 2020.

3 Ballistic Missiles and Other Missiles

Ballistic missiles are propelled by rockets for parabolic flights and are capable of attacking distant targets. They can be used as a means of delivering WMDs, such as NBC weapons. As they fall at a steep angle and high speed, highly accurate systems are required for intercepting them effectively.

 See Fig. I-3-6-2 (Classification of Ballistic Missiles)

The deployment of ballistic missiles in a region where an armed conflict is under way runs the risk of intensifying or expanding the conflict. Additionally, it has the risk of further heightening tension in a region where military confrontation is ongoing, leading to the destabilization of that region. Furthermore, ballistic missiles are used as a means of attacking from a distance or threatening another country that has superior conventional forces.

In recent years, along with the threat of ballistic missiles, analysts have pointed to the threat of cruise missiles as a weapon which is comparatively easy for terrorists and other non-state actors to acquire and has the potential for proliferation. Because cruise missiles are cheaper to produce compared to ballistic missiles and

are easy to maintain and train with, many countries either produce or modify cruise missiles. At the same time, it is said that cruise missiles have a higher degree of target accuracy and that they are difficult to detect while in flight. Moreover, because they are smaller than ballistic missiles, cruise missiles can be concealed on a ship to secretly approach a target and present a serious threat if they carry WMDs in their warheads.

Fig. I-3-6-2 Classification of Ballistic Missiles

Description	Range
Short Range Ballistic Missile, SRBM	Under approx. 1,000 km or less
Medium Range Ballistic Missile, MRBM	Approx. 1,000 to under approx. 3,000 km
Intermediate Range Ballistic Missile, IRBM	Approx. 3,000 to under approx. 5,500 km
Inter-Continental Ballistic Missile, ICBM	Approx. 5,500 km or more

* Ballistic missiles launched from submarines are collectively referred to as submarine-launched ballistic missiles (SLBMs), while a ballistic missile that has a precision guidance system on its warhead necessary to attack aircraft carriers and other vessels is called an anti-ship ballistic missile (ASBM).

² They refer to means of attack to strike an adversary's vulnerable points and are not conventional means. They include WMDs, ballistic missiles, terrorist attacks, and cyber attacks.
³ See Part I, Chapter 2, Section 10-4 for general information about the Syria situation.

4 Growing Concerns about Transfer and Proliferation of WMDs and Other Technologies

Even weapons that were purchased or developed for self-defense purposes could easily be exported or transferred once domestic manufacturing becomes successful. For example, certain states that do not heed political risks have transferred WMDs and related technologies to other states that cannot afford to invest resources in conventional forces and attempt to offset this with WMDs. Some of these states that seek WMDs do not hesitate to put their land and people at risk, and furthermore, due to their weak governance, terrorist organizations are active in their territories. Therefore, it is conceivable that in general, the possibility of actual use of WMDs would increase.

Moreover, since it is uncertain whether such states can effectively manage the related technology and materials, there is a concern that chemical or nuclear substances will be transferred or smuggled out from these states with high likelihood. For example, there is a danger that even terrorists who do not possess related technologies would use a dirty bomb to release radioactive materials for pollution as a means of terrorist attack so long as they gain access to such materials. Nations across the world share concerns regarding the acquisition and use of WMDs by terrorists and other nonstate actors.

The proliferation of WMDs and other related technologies has been noted in numerous instances. For example, in February 2004, it came to light that nuclear-related technologies, mainly uranium enrichment technology, had been transferred to North Korea, Iran, and Libya by Dr. A.Q. Khan and other scientists in Pakistan. It has also been suggested that North Korea supported Syria's secret nuclear activities.⁴

Furthermore, there has been significant transfer and proliferation of ballistic missiles that serve as the means of delivery of WMDs. The former Soviet Union and other countries exported Scud-B to many countries and regions, including Iraq, North Korea, and Afghanistan. China and North Korea also exported DF-3 (CSS-2) and

Scud missiles, respectively. As a result, a considerable number of countries now possess ballistic missiles.

It is pointed out that North Korea continues to be an outward source of proliferation of technologies, conventional weapons and items for supply chains related to WMDs. For example, it has been pointed out that the Transporter-Erector-Launcher (TEL) for two types of short-range ballistic missile test launched in 2019 were sand or tan colored for marketing purposes.⁵

North Korea made rapid strides in the development of its ballistic missiles with only a few test launches in the 1980s and 1990s. It is believed that an underlying factor behind this fact was North Korea's imports of various materials and technologies from outside of North Korea. It is also noted that North Korea transfers ballistic missile airframes and related technologies and promotes the further development of missiles using funds procured through such transfer.⁶

The international community's uncompromising and decisive stance against the transfer and proliferation of WMDs and other technologies has put significant pressure on countries engaged in related activities, leading some of them to accept inspections by international organizations or abandon their WMD and other programs altogether. Meanwhile, it is pointed out that, in recent years, states in which transferring is a concern have sustained their external transfer while averting international monitoring by falsifying documentation, diversifying transport routes, and utilizing multiple front companies and intermediaries to illicitly export WMDs. Additionally, intangible technology transfer has arisen as a cause for concern. Namely, those states have obtained advanced technologies which could be adapted for the development and manufacturing of WMDs and other technologies via their nationals — researchers and students who have been dispatched to leading companies and academic institutions in developed countries.

⁴ According to "Worldwide Threat Assessment," U.S. Director of National Intelligence (January 2014)

⁵ According to reports released by the Panel of Experts of the UN Security Council Democratic People's Republic of Korea (DPRK) Sanctions Committee (April 2020)

⁶ According to the report titled "Military and Security Developments Involving the Democratic People's Republic of Korea," which was submitted by U.S. DoD to Congress in May 2018, etc.

Section 7

Trends in International Terrorism

1 General Situation

Conflicts or disputes concerning racial, religious, territorial, resources and other issues are occurring or continuing in various places in the world. Human rights violations, refugees, famine, poverty, or any other consequences of conflicts or disputes can have impacts on not only parties to the conflicts or disputes but also a wide range of other countries.

There are prominent cases where power vacuums in some countries with political instability or weak governance have become a hotbed for activities of international terrorist organizations, such as Al Qaeda and Islamic State in Iraq and the Levant (ISIL). These organizations are leveraging inadequate border control to obtain personnel, weapons and funds, and to send fighters to various places to carry out organized terrorist attacks or give some instructions to local individuals or groups, expanding and stepping up their operations across national borders. In recent years, they have also been spreading their violent extremist ideologies through the Internet and other means across the world. As a result, there were cases where young people in Western and other developed countries felt sympathy for the violent radical beliefs due to their social discontent, participating as fighters in international terrorist groups and carrying out terrorist attacks in their home countries. Terrorist organizations such as ISIL and Al Qaeda have propagated practical tactics of terrorism through their journals and other media and encourage their supporters to implement them. Under the circumstances, what is called “home-grown” terrorism, in which residents are inspired by violent extremism spread by terrorist organizations to conduct terrorist attacks at home, remains a threat. In recent years, particularly, “lone-wolf” terrorist attacks, planned and committed by individuals or groups who have no official relations with international terrorist organizations but have become influenced by them in some ways, have occurred in Western and other countries. The characteristics of “lone-wolf” terrorism include that it uses items that are relatively easy for individuals to obtain, such as knives, vehicles, and guns, and that it is

difficult to detect signs of planned attacks and prevent them from happening.

In March 2019, an unprecedented incident occurred in Christchurch, New Zealand, where the perpetrator of a terrorist attack (a shooting) live-streamed the crime on social media and the footage was instantaneously disseminated. In this incident, an Islamic mosque was attacked by a white supremacist. Such incidents of terrorism driven by far-right thinking targeting a specific religion or race are becoming particularly pronounced in Europe and North America.

Furthermore, following the worldwide spread of the COVID-19 pandemic, there are concerns about the potential increase in activities around the world by terrorist organizations and others. In September 2020, U.N. Secretary-General Antonio Guterres maintained that there was an urgent need for global unity and solidarity, warning that terrorists were exploiting hardships caused by COVID-19 to radicalize and recruit new followers and that Neo-Nazis and white supremacists were stirring up social division. According to a UN report, terrorist organizations and violent extremists are spreading disinformation and conspiracy theories concerning COVID-19 through social media in an attempt to sow distrust in governments, justify their own thoughts, and increase recruiting activities.¹ It is reported that youth, who are spending more time on the Internet following the loss of schooling or job opportunities due to the spread of COVID-19, are particularly vulnerable to these online recruiting activities, which pose a new challenge.

Concerning international counterterrorism measures, international cooperation has grown even more important as terrorism threats have diffused and deepened on the diversification of terrorist attacks and the improvement of terrorist groups’ attack capabilities. Currently, countries are cooperating not only in military measures but also in initiatives in various other fields to cut off funding sources for terrorist organizations and prevent the international movement of terrorists and the diffusion of violent radical beliefs.

¹ According to a November 2020 report “Stop the Virus of Disinformation” published by the United Nations Interregional Crime and Justice Research Institute (UNICRI)

2 Trends in ISIL-related International Terrorist Organizations

The objective of ISIL as an organization is to claim the establishment of the caliphate² based on its own interpretation of Sharia law and the protection of Sunni³ Muslims. ISIL expanded its presence from 2013 in Iraq and Syria, which had been destabilized due to religious disputes and civil war, and took control of northern and eastern Syria and northern Iraq from January 2014. In June 2014, ISIL unilaterally declared the establishment of the Islamic State, with Baghdadi as its leader.

In response to the expansion of ISIL's reach, the Coalition forces led by the United States have been conducting air strikes in Iraq and Syria since August and September of the same year, respectively. The coalition forces have also engaged in providing local forces with education, training, and weapons, and conducting hostage rescue by the special forces. In cooperation with such military operations and with support from the United States and other countries, the Iraqi Security Forces and local forces in Iraq and Syria proceeded to recapture ISIL's strongholds. In March 2019, then U.S. President Trump declared in a statement that the United States and coalition forces had liberated 100% of ISIL-controlled areas in Syria and Iraq. Meanwhile, with the support from Russia, the Assad administration conquered ISIL strongholds mainly in southern and eastern Syria. In December 2017, Russia declared that Syria's entire territory had been liberated from ISIL. In October 2019, the United States announced that it had killed ISIL's leader Baghdadi in northwestern Syria.

While anti-ISIL military operations have made progress, it is pointed out that about 10,000 ISIL fighters remain active in Iraq and Syria.⁴ In this regard, terrorist attacks believed to be conducted by ISIL are occurring in various regions of Iraq and Syria, targeting security forces, the Coalition forces, citizens and others, indicating that ISIL remains still active. In Syria, in particular, it is pointed out that ISIL may regain strength by exploiting the drawdown of some U.S. forces in northeastern Syria and the launch of Turkish military operations against

Kurdish groups in October 2019 to reconstitute its capabilities and resources in Syria and strengthen its ability to plan attacks abroad.⁵ Furthermore, ISIL is calling for supporters so as to prepare for terrorist acts by taking advantage of the situation where Europe and North America is distracted by the COVID-19 pandemic. There is also a report that ISIL is conducting recruiting activities targeting youth who are experiencing economic hardships during the COVID-19 pandemic.⁶

Meanwhile, after ISIL declared the establishment of the "Islamic State," multiple "provinces" have been established outside of Iraq and Syria as the "Islamic State" territories, and these "provinces" have been conducting terrorist acts in various places.

 See Fig. I-3-7-1 (Major Terrorist Groups Based in Africa and the Middle East)

Organizations supporting ISIL exist in Southeast Asia and have conducted terrorist attacks targeting security forces and citizens. Moreover, in South Asia, large-scale explosions occurred simultaneously in Sri Lanka in April 2019, claiming the life of a Japanese national. The Sri Lanka authority exposed a local Islamic extremist organization as the perpetrator while referring to possible support for the organization from a foreign terrorist organization. After the attack, ISIL claimed responsibility for it, and the United States points out that the terrorist attacks may have been inspired by ISIL. As ISIL is spreading violent extremist ideologies through social media and other means, there are concerns that the threat is spreading to South Asia and other areas. Additionally, terrorism has become increasingly serious in the Africa region. Especially in Western Africa, there have been a number of attacks by terrorist groups pledging allegiance to ISIL, with the number of victims and refugees increasing sharply.

In addition, there continues to be a concern in Western countries that foreign fighters entering Iraq and Syria will return to their home countries to carry out a terrorist act after receiving combat training and gaining combat experience in the countries. Terrorist

² The term means "successor" in Arabic. After Prophet Muhammad died, the term was used to refer to the leader of the Islamic community. Afterwards, monarchs of hereditary dynasties, including the Umayyad and Abbasid dynasties, utilized this title.

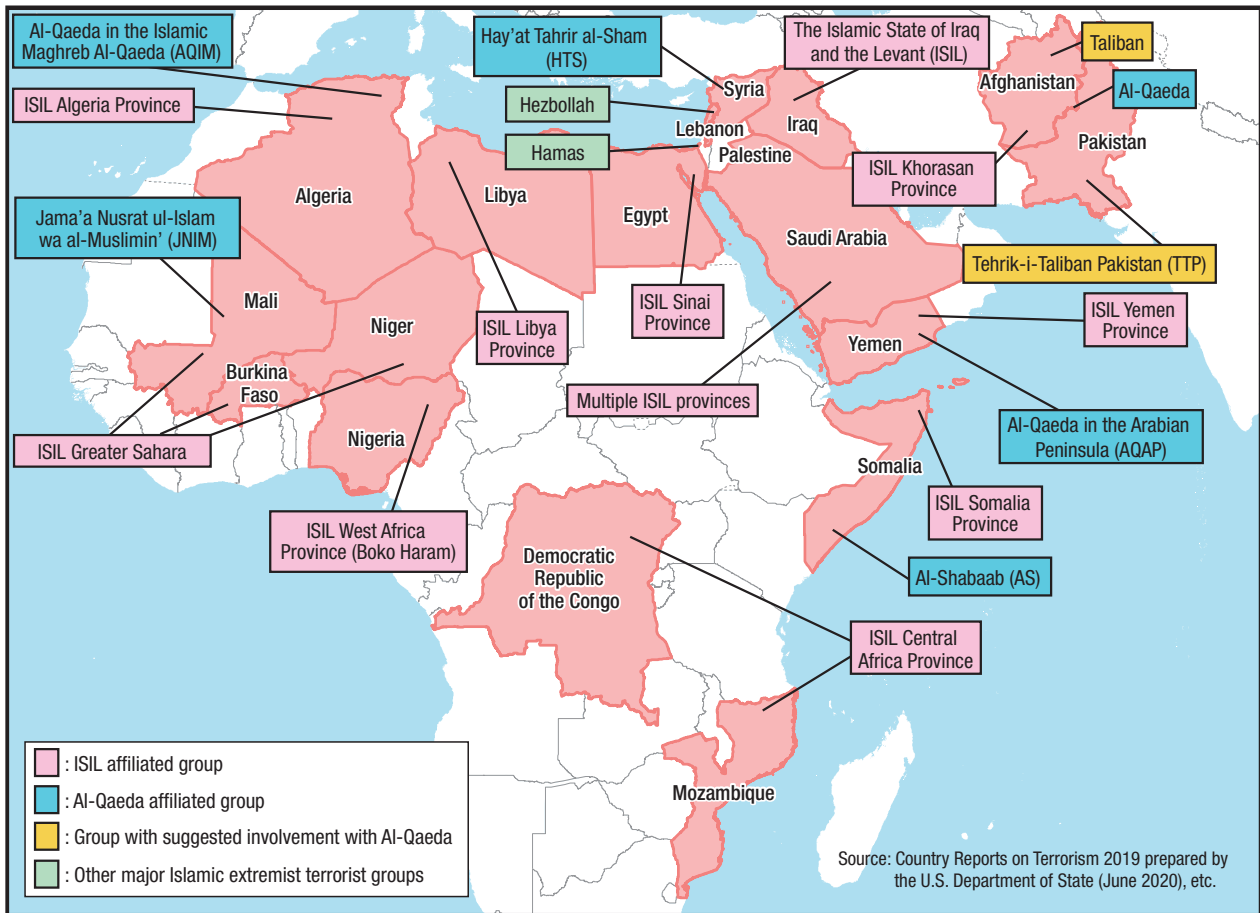
³ One of the two major sects of Islam. The split from the Shia sect originated in the difference in views on the successors (caliphate) to the Prophet Muhammad (died in 632), who founded Islam. Sunni Islam, currently the largest sect, is the majority in most of the Muslim countries in the Middle East and North Africa region. Shia Islam is the state religion in Iran and Shiites are also the majority in Iraq.

⁴ According to a January 2021 report "Twelfth report of the Secretary-General on the threat posed by ISIL (Da'esh) to international peace and security and the range of United Nations efforts in support of Member States in countering the threat" submitted to the UN Security Council by the UN Secretary-General

⁵ According to a November 2019 report "Operation Inherent Resolve" submitted to Congress by the U.S. DoD Office of the Inspector General

⁶ According to a November 2020 report "Operation Inherent Resolve" submitted to Congress by the U.S. DoD Office of the Inspector General

Fig. I-3-7-1 Major Terrorist Groups Based in Africa and the Middle East



attacks in which ISIL fighters with fighting experience in Syria have allegedly engaged have taken place in Europe, including simultaneous attacks in Paris in November 2015 and serial bombings in Belgium in March 2016. Western countries have begun to accept some of these foreign fighters following Turkey's

announcement in November 2019 that it would repatriate as many as the 1,200 ISIL fighters it had detained. The international community will need to continue various efforts to prevent terrorism by foreign fighters.

3 Movements of International Terrorist Organizations Other Than ISIL-Affiliated Groups

Al Qaeda, which operates primarily in Pakistan and Afghanistan, is believed to have weakened as many of the group's senior members were killed by U.S. operations. However, it continues activities as a central organization, such as issuing instructions and recommendations to its affiliates in North Africa and the Middle East. In addition, the current Al Qaeda leader Zawahiri has repeatedly issued statements calling for terrorist acts against the West. The possibility of Al Qaeda attacks has not disappeared.

Other currently active Sunni Islamist militant organizations associated with Al Qaeda include Al Qaeda

in the Arabian Peninsula (AQAP) based in Yemen, Al Qaeda in the Islamic Maghreb (AQIM) based in Algeria and operating in neighboring Mali, Tunisia and Libya, and Al-Shabaab based in Somalia.

The Taliban, an Islamic extremist organization based in Afghanistan, continues to conduct armed activities in various parts of Afghanistan. Although an agreement was signed between the United States and the Taliban in February 2020 that included a conditional phased withdrawal of U.S. troops in Afghanistan and the start of negotiations between Afghans, and in September 2020 peace talks were

started between the Afghan Government and the Taliban, the Taliban has since carried out attacks on Afghan security forces and there is no denying that

it may continue to carry out suicide bombings and shootings targeting the government and foreigners.

Section 8

Impact of Climate Change on the Security Environment and the Military

In September 2013, the Intergovernmental Panel on Climate Change (IPCC) published a report stating that the warming of the climate system was unequivocal based on observations of the rising temperature of the atmosphere and oceans, melting of snow and ice, rising sea levels, and increased concentration of greenhouse gases. It was believed that the impact of such climate change is not regionally uniform and affecting not only meteorology and environment but also a multitude of fields including society and economy. In this context, the Paris Agreement entered into force as a new international framework for reducing greenhouse gas emissions in November 2016. Given these circumstances, recently the UN Security Council has been showing itself to be proactive in dealing with climate change as a substantial issue in terms of security. The Council had addressed the negative impacts on security due to climate change such as water scarcity, drought, desertification, land degradation, and food insecurity, in over 10 resolutions mainly of the UN's stabilization and assistance missions conducted in Africa.¹

Recognizing climate change as a security issue is shared among countries. For example, water, food, and land shortages as a result of combined influences from climate change are believed to contribute to and exacerbate conflicts over limited land and resources, as well as induce large-scale migration, and social and political tensions and conflicts.

Moreover, widespread impact of climate change can burden each country's response capability and particularly shake the stability of vulnerable countries with political and economic issues. Consequently, the need for international assistance including military operations on such destabilized countries is expected to rise.

Additionally, it was pointed out that the tensions among countries may be heightened over regulations of greenhouse gas emissions and use of geoengineering (climate engineering).

Furthermore, as melting of sea ice in the Arctic Sea can increase opportunities for use as a sea route and lead to easier access to undersea resources, coastal nations, trying to ensure ocean interests, have begun to embark on seafloor investigations to claim an extension of continental shelves and enhance military posture in the Arctic areas. And it was pointed out that attention should be put on the impact of glacier melting in the Tibetan

Plateau, which is the source of many big rivers in Asia, including the Yellow River, Yangtze River, Mekong River, Indus River, and Brahmaputra River.

Regarding the direct impact of climate change on the military, increasingly extreme weather is believed to increase large-scale disasters and spread infections. Accordingly, each country's military is expected to have more opportunities to be dispatched for such duties as rescue operations, humanitarian and reconstruction operations, security duties, and medical assistances.

In addition, rising temperatures, extreme weather, and rising sea levels are thought to increase the burden on military equipment, bases, and training facilities.

It was also pointed out that there is a possibility of growing demand for the military to take further environmental measures, such as mitigation of greenhouse gas emissions.

Countries state that they will assess such impacts of climate change on their security environment and military, and consider their responses in their policy documents.

The United States, whose military is noted to emit comparable amounts of greenhouse gases to a nation with their operations worldwide, assessed the impacts of climate change on the U.S. military facilities and operations, and indicated a policy to actively tackle such impacts and mitigate greenhouse gas emissions.

The U.S. Department of Defense (DoD) positions the Quadrennial Defense Review, which was published in February 2010 during the Obama administration, as the foundation for policies to tackle climate change. In this document, climate change and its inextricably linked energy issues are considered to play a significant role in shaping the future security environment, and the DoD indicates the policy to respond to impacts of climate change as well as takes measures to mitigate such impacts. As a part of initiatives, the DoD has been implementing measures to introduce alternative fuel which contributes to mitigate greenhouse gas emissions, such as the U.S. Navy's Great Green Fleet that uses mixed fuel with biofuels, in addition to nuclear power.

During the Trump administration, surveys of U.S. military installations and operations worldwide were conducted to assess the vulnerability to climate change. In the report published in January 2019, it was indicated that flooding, drought, and wildfires were primary concerns. Particularly, 60 out of 79 main installations were assessed

¹ China and Russia, permanent members of the UN Security Council, believed that climate change was fundamentally a sustainable-development issue that was more appropriately addressed by other parts of the UN system, such as the United Nations General Assembly and the United Nations Framework Convention on Climate Change (UNFCCC), and therefore they were less supportive of Council engagement on climate change at the Security Council Open Debate. In addition, India, as another top greenhouse gas emissions country along with China and Russia, stated that the nexus between climate change and security was complex, contingent and still contested at the open debate held by the Council in January 2019.

as potentially vulnerable to flooding. The report also evaluated issues related to the U.S. military operations, such as country instability issues, logistic issues, Arctic region issues, humanitarian assistance and disaster relief, and pointed out that climate change may affect the U.S. military's missions in some cases.

Given this background, President Biden issued an executive order on tackling the climate crisis in January 2021, following his inauguration. This order includes a section that restates the Presidential Memorandum issued by the Obama administration, titled Climate Change and National Security, indicating policy continuity from the administration. The recognition that climate change has become a climate crisis is showed in the order, and putting climate crisis at the center of United States foreign policy and national security. The order directed the U.S. Secretary of Defense to analyze the security implications of climate change, and incorporate such impacts into the formulation of strategic and policy documents, including the National Defense Strategy. Consequently, a statement on climate change was made by U.S. Secretary of Defense Austin and he said that the DoD has acknowledged that the changing climate has a dramatic effect on their missions, plans and installations. According to the statement, the DoD has been experiencing impacts of increasing incidents of flooding, drought, wildfires, and extreme weather events on their installations in the U.S. every year. It was also stated that the U.S. Forces commanders conduct operations that result from instability in societies strained by desertification, the threat of adversary access to homelands of the U.S. through the Arctic, and the demands for humanitarian assistance worldwide. The DoD recognizes climate change as an essential element in national security and will include such impacts in strategy development and planning guidance as directed by President Biden. This statement also mentions spurring the development of climate-friendly technology and changing how to approach the carbon footprint.

France, one of the leading countries in international initiatives concerning climate change, puts climate change at the forefront of a number of risks and indicates its view that there is a need for the military operational adaptation and contribution to sustainable development from the perspective of France having vast sea areas in overseas territories. The French Ministry of Armed Forces stated in a policy document on climate change published in 2018 that the intensification of extreme weather events amplifies the number and severity of humanitarian crises, requiring a greater mobilization of military forces. It also announced the GREEN DEFENCE strategy to favor eco-design for military equipment and optimize carbon footprint of military infrastructures by better energy efficiency and using renewable energies.

Australia, as a country that is closely related to Oceanic island nations, which are considered to be one of the most vulnerable countries to climate change, considers the vulnerability of its neighboring countries to climate change as one of the main factors in forming its strategic environment, and has been implementing policies proactively to prevent destabilization in the region. In the Defense White Paper released in February 2016 by the Australian Department of Defense, climate change was noted as a major challenge for countries in Australia's immediate region, and Australia indicated the importance of supporting these countries because instability in the immediate region could lead to severe impacts on Australia. Moreover, it was pointed out that rising sea levels will place pressure on navy bases, and more extreme weather events are more frequently putting defense facilities at the risk of damage. The Department of Defense will be appropriately postured for climate change.

New Zealand, another country closely related to Oceanic island nations, indicated a policy that places preparation and response to climate change as a top priority for the military. It was stated in a policy document released by the New Zealand Ministry of Defense in November 2019 that ensuring the ability to operate and undertake tasks in New Zealand's territory and its neighborhood is the highest priority, and response to climate change is a key component of this priority. In addition, it was also stated that humanitarian assistance and disaster relief operations are expected to increase in the future, particularly in New Zealand's neighborhood, and there is a need to adapt to the growing number of tasks induced by climate change. Moreover, assuming the maritime operations' increase due to climate change, it has indicated its plan to meet the demand of such operations through the defense capability plan involving enhancements to sealift, airlift and maritime domain awareness capabilities, as well as an increase in the size of the New Zealand Army to 6,000 personnel. Additionally, New Zealand Defence is establishing a method of measuring greenhouse gas emissions for mitigation in the future.

In this manner, the recognition that climate change may cause various impacts on the security environment and the military has been shared rapidly. In April 2021, the Climate Security Session was held at the Leaders' Summit on Climate hosted by the United States. The session, moderated by U.S. Secretary of Defense Austin, was attended by Minister of Defense Kishi, the U.S. Director of National Intelligence, the U.S. ambassador to the UN, Secretary General of the North Atlantic Treaty Organization (NATO), defense ministers from Iraq, Kenya, Spain, and the United Kingdom, and

the minister of finance of the Philippines, to discuss global security issues caused by climate change and their countermeasures. During the discussions, defense officials noted that their ministries are increasingly called upon to respond to disasters thus elevating the need for enhanced disaster preparedness and response.

In addition, they described the benefits of collaboration between defense ministers on shared climate crisis. As the defense authorities consider their measures and begin tackling them, climate change requires close monitoring with keen attention as a security issue.

Chapter
3

Trends Concerning New Domains including Outer Space, Cyberspace, and Electromagnetic Spectrum, and Relevant Challenges Facing the International Community

Part

II

Japan's Security and Defense Policy

Chapter 1

Basic Concepts of Japan's Security and Defense

Chapter 2

Japan's Security and Defense Policy

Chapter 3

Organizations Responsible for Japan's Security and Defense

Chapter 4

Build-up of Defense Capability, etc.

Chapter 5

Framework for Activities of the SDF and Others

Basic Concepts of Japan's Security and Defense

Section 1

Measures to Ensure Japan's Security

The independent state of a nation must be protected in order for it to determine its own direction in politics, economy, and society, as well as maintaining its culture, tradition, and sense of values. In addition, peace and security are essential for the people to live with a sense of safety and for Japan to continue to prosper. However, peace, safety, and independence cannot be secured by simply wishing for them. The essence of national security can be found in creating an international environment that is stable and predictable, while preventing the emergence of threats before they occur, through diplomacy.

Nevertheless, the reality of the current international community suggests that it is not necessarily possible to prevent invasions from the outside by employing only nonmilitary means such as diplomatic efforts, and in the event that the nation were to be invaded it would not be able to remove such a threat. Defense capabilities are the nation's ultimate guarantee of security, expressing its will and capacity to eliminate foreign invasions, and they cannot be replaced by any other means.

For this reason, Japan is striving to develop appropriate defense capabilities to protect the life and properties of its nationals and to defend the territorial land, sea, and airspace of Japan. At the same time, it is strengthening the Japan-U.S. Alliance¹ with the United States, which shares basic values and interests with Japan. This underlines



Minister of Defense Kishi attends an honor guard ceremony

that the peace and security of Japan is ensured through developing seamless defense measures by coupling Japan's own defense capabilities with the Japan-U.S. Security Arrangements.

Moreover, from the perspective of improving the security environment surrounding Japan and preventing the emergence of threats to Japan, the importance of the role played by defense capabilities is increasing in cooperative efforts as a member of the Indo-Pacific region and the international community.

Upon recognizing the role of defense capabilities, Japan aims to ensure national security as well as bringing peace and safety to the Indo-Pacific region, and eventually to the entire world through making its utmost efforts in a variety of fields.

¹ In general, this refers to the relationship, based on the Japan-U.S. Security Arrangements, whereby both nations, as countries sharing fundamental values and interests, coordinate and cooperate closely in a range of areas in security, politics, and economics.

Section 2

Constitution and the Basis of Defense Policy

1 Constitution and the Right of Self-Defense

After the end of World War II, Japan was determined not to repeat the ravages of war. Since then, it has worked hard to build a peace-loving nation. The Japanese people desire lasting peace, and the principle of pacifism is enshrined in the Constitution, Article 9, which prescribes the renunciation of war, the prohibition of war potential, and the denial of the right of belligerency of the state. Of course, since Japan is an independent nation, these provisions do not deny Japan's inherent right of self-

defense as a sovereign state. Thus, the Japanese Government interprets it as a constitutional right to possess the minimum armed forces needed to exercise that right.

Therefore, Japan, under the Constitution, maintains the Self-Defense Forces (SDF) as an armed organization, holding its exclusively defense-oriented policy as its basic strategy of defense, and continues to keep it equipped and ready for operations.

2 The Government's View on Article 9 of the Constitution

1 Permitted Self-Defense Capability

Under the Constitution, Japan is permitted to possess the minimum required self-defense capability. The specific limit is subject to change according to the prevailing international situation, the level of military technologies, and various other factors, and it is discussed and decided through annual budget and other deliberations by the Diet on behalf of the people. Whether its capability constitutes a "war potential" that Japan is prohibited to possess by Article 9, Paragraph 2 of the Constitution must be considered within the context of Japan's overall military strength. Therefore, whether the SDF should be allowed to possess certain armaments depends on whether such a possession would cause its total military strength to exceed the constitutional limit.

The possession of so-called "offensive weapons," which are designed to be used only for the mass destruction of another country, is not permissible under any circumstance as it would directly exceed the definition of the minimum necessary level for self-defense. For example, the SDF is not allowed to possess intercontinental ballistic missiles (ICBM), long-range strategic bombers, or attack aircraft carriers.

2 Measures for Self-Defense Permitted under Article 9 of the Constitution

It has been concluded in the Cabinet's decision made on July 1, 2014, "Development of Seamless Security Legislation to Ensure Japan's Survival and Protect its People," that "the use of force" should be interpreted to be permitted under the Constitution as measures for self-defense when the following "Three New Conditions"

are met: (1) When an armed attack against Japan has occurred, or when an armed attack against a foreign country that is in a close relationship with Japan occurs and as a result threatens Japan's survival and poses a clear danger to fundamentally overturn people's right to life, liberty and pursuit of happiness; (2) When there is no appropriate means available to repel the attack and ensure Japan's survival and protect its people; (3) Use of force to the minimum extent necessary.

The following is the interpretation of the measures for self-defense permitted under Article 9 of the Constitution defined in the abovementioned Cabinet decision.

The language of Article 9 of the Constitution appears to prohibit "use of force" in international relations in all forms. However, when considered in light of "the right (of the people) to live in peace" as recognized in the Preamble of the Constitution and the purpose of Article 13 of the Constitution which stipulates, "their (all the people's) right to life, liberty, and the pursuit of happiness" shall be the supreme consideration in governmental affairs, Article 9 of the Constitution cannot possibly be interpreted to prohibit Japan from taking measures of self-defense necessary to maintain its peace and security and to ensure its survival. Such measures for self-defense are permitted only when they are inevitable for dealing with imminent unlawful situations where the people's right to life, liberty, and the pursuit of happiness is fundamentally overturned due to an armed attack by a foreign country, and for safeguarding these rights of the people. Hence, "use of force" to the minimum extent necessary to that end is permitted. This is the basis, or the so-called basic logic, of the view consistently expressed by the government to date with regard to "use of force" exceptionally permitted under

Article 9 of the Constitution, and clearly shown in the document “Relationship between the Right of Collective Self-Defense and the Constitution” submitted by the Government to the Committee on Audit of the House of Councillors on October 14, 1972.

This basic logic must be maintained under Article 9 of the Constitution.

To date, the Government has considered that “use of force” under this basic logic is permitted only when an “armed attack” against Japan occurs. However, in light of the situation in which the security environment surrounding Japan has been fundamentally transformed and continuously evolving by shifts in the global power balance, the rapid progress of technological innovation, and threats such as weapons of mass destruction, etc., in the future, even an armed attack occurring against a foreign country could actually threaten Japan’s survival, depending on its purpose, scale and manner, etc.

Japan, as a matter of course, will make the utmost diplomatic efforts, should a dispute occur, for its peaceful settlement and take all necessary responses in accordance with the existing domestic laws and regulations developed based upon the constitutional interpretation to date. It is still required, however, to make all necessary preparations in order to ensure Japan’s survival and protect its people.

Under such recognition and as a result of careful examination in light of the current security environment, it has been concluded that not only when an armed attack against Japan occurs but also when an armed attack against a foreign country that is in a close relationship with Japan occurs and as a result threatens Japan’s survival and poses a clear danger to fundamentally overturn people’s right to life, liberty and pursuit of happiness, and when there is no other appropriate means available to repel the attack and ensure Japan’s survival and protect its people, use of force to the minimum extent necessary should be interpreted to be permitted under the Constitution as measures for self-defense in accordance with the basic logic of the Government’s view to date.

As a matter of course, Japan’s “use of force” must be carried out while observing international law. At the same time, a legal basis in international law and constitutional interpretation need to be understood separately. In certain situations, the aforementioned “use of force” permitted under the Constitution is, under international law, based

on the right of collective self-defense. The Government has reached a conclusion that although this “use of force” includes those which are triggered by an armed attack occurring against a foreign country, they are permitted under the Constitution, only when they are taken as measures for self-defense which are inevitable for ensuring Japan’s survival and protecting its people, in other words, for defending Japan.

3 Geographic Boundaries within Which the Right of Self-Defense May Be Exercised

The use of the minimum necessary force to defend Japan under the right of self-defense is not necessarily confined to the geographic boundaries of Japanese territory, territorial waters, and airspace. However, it is difficult to give a general definition of the actual extent to which it may be used, as this would vary with the situation.

Nevertheless, the Government interprets that, as a general rule, the Constitution does not permit armed troops to be dispatched to the land, sea, or airspace of other countries with the aim of using force; such overseas deployment of troops would exceed the definition of the minimum necessary level for self-defense.

4 Right of Belligerency

Article 9, Paragraph 2 of the Constitution prescribes that “the right of belligerency of the state will not be recognized.” However, the “right of belligerency” does not mean the right to engage in battle; rather, it is a general term for various rights that a belligerent nation has under international law, including the authority to inflict casualties and damage upon the enemy’s military force and to occupy enemy territory.

On the other hand, Japan may of course use the minimum level of force necessary to defend itself. For example, if Japan inflicts casualties and damage upon the enemy’s military force in exercising its right of self-defense, this is conceptually distinguished from the exercise of the right of belligerency, even though those actions do not appear to be different. Occupation of enemy territory, however, is not permissible because it would exceed the minimum necessary level for self-defense.

3 Basic Policy

Under the Constitution, Japan has efficiently built a highly effective and joint defense force in line with the basic principles of maintaining an exclusively defense-

oriented policy and not becoming a military power that poses a threat to other countries, while firmly maintaining the Japan-U.S. Security Arrangements, adhering to the

principle of civilian control of the military, and observing the Three Non-Nuclear Principles.

1 Exclusively Defense-Oriented Policy

The exclusively defense-oriented policy means that defensive force is used only in the event of an attack, that the extent of the use of defensive force is kept to the minimum necessary for self-defense, and that the defense capabilities to be possessed and maintained by Japan are limited to the minimum necessary for self-defense. The policy including these matters refers to the posture of a passive defense strategy in accordance with the spirit of the Constitution.

2 Not Becoming a Military Power

There is no established definition for the concept of a military power. For Japan, however, not becoming a military power that could threaten other countries means that Japan will not possess and maintain a military capability strong enough to pose a threat to other countries, beyond the minimum necessary for self-defense.

3 Non-Nuclear Principles

The Three Non-Nuclear Principles refers to those of not possessing nuclear weapons, not producing them, and not allowing them to be brought into Japan. Japan adheres to the Three Non-Nuclear Principles as a fixed line of national policy.

Japan is also prohibited from manufacturing and possessing nuclear weapons under the Atomic Energy Basic Law.¹ In addition, Japan ratified the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and as a nonnuclear weapons state, has an obligation not to manufacture and acquire nuclear weapons.²

4 Securing Civilian Control

Civilian control refers to the priority of politics to the military in a democratic state or democratic political control of military strength. Japan has, by giving serious reflection to the regrettable state of affairs that happened until the end of World War II, adopted the following strict civilian control system that is entirely different from the

one under the former Constitution.³ Civilian control aims to ensure that the SDF is maintained and operated in accordance with the will of the people.

The Diet, which represents Japanese nationals, makes legislative and budgetary decisions on such matters as the allotted number of the SDF personnel and main organizations of the Ministry of Defense (MOD)/SDF. It also issues approval for defense operations of the SDF. The function of national defense entirely falls under the executive power of the Cabinet as a general administrative function. The Constitution requires that the Prime Minister and other Ministers of State who constitute the Cabinet be civilians. The Prime Minister, on behalf of the whole Cabinet, holds the authority of supreme command and supervision of the SDF. The Minister of Defense, who is exclusively in charge of national defense, exercises general control and supervises over the SDF duties. In addition, the National Security Council of Japan under the Cabinet deliberates important matters on national security.

At the MOD, the Minister of Defense takes charge of and manages the matters concerning national defense, and as the competent minister also manages and operates the SDF. The Minister of Defense is assisted in policy planning and political affairs by the State Minister of Defense, the Parliamentary Vice-Ministers of Defense (two) and the Senior Adviser to the Minister of Defense.

In addition, the Special Adviser to the Minister of Defense provides the Minister of Defense with advice on important affairs under the jurisdiction of the MOD based on their expertise and experience. The Defense Council consisting of political appointees, civilian officials and uniformed SDF personnel deliberates on basic principles concerning affairs under the Ministry's jurisdiction. Through these ways, the MOD aims to further ensure civilian control.

As mentioned above, the civilian control system is well established. However, in order to ensure that the system achieves good results, it is necessary to continue making practical efforts in both political and administrative aspects, along with a deep interest in national defense taken by the people.



Chapter 3, Section 1 (National Security Council), p. 220

Chapter 3, Section 2-1-2 (Systems to Support the Minister of Defense), p. 221

¹ Article 2 of the Atomic Energy Basic Law states that "The research, development and utilization of atomic energy shall be limited to peaceful purposes, aimed at ensuring safety and performed independently under democratic management."

² Article 2 of the NPT states that "Each non-nuclear-weapon State Party to the Treaty undertakes...not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices..."

³ The Cabinet's control over military matters was strictly limited.

Section 1

Outline of the National Security Strategy (NSS)

1 Japan's National Security Policy Framework

The NSS was formulated in December 2013 as Japan's first ever basic policy on national security with a focus on diplomatic affairs and defense policy. It defines approaches that Japan should follow based on a long-term view of its national interests.

The National Defense Program Guidelines (NDPG), which was established based on the NSS, defines basic policies for Japan's future defense, the role of its defense capabilities, and objectives for specific Self-Defense Forces (SDF) equipment. The NDPG was formulated with a medium-to-long-term outlook because the acquisition of equipment and the establishment of troop operational

systems cannot be accomplished overnight and requires many years of planning. The NSS and NDPG are mainly designed for the next decade or so.

The Medium Term Defense Program (MTDP) specifies a maximum budget and the amount of mainstay defense equipment to be acquired over the subsequent five-year period in order to achieve the defense capability targets defined in the NDPG. The fiscal year budget is drawn on the MTDP substantiated as projects, and the necessary expenses for each fiscal year will be appropriated based on relevant situations.

2 Outline of the NSS: Proactive Contribution to Peace

The NSS calls on Japan to contribute more proactively than ever before to the peace, stability, and prosperity of the international community, while seeking its own security as well as peace and stability in the Asia-Pacific region, in close cooperation with related countries, including the United States, based on the fundamental principle of a Proactive Contribution to Peace.

Furthermore, in achieving this fundamental principle of national security, it makes national interests and goals clear, and demonstrates a strategic approach that needs to be employed.


 See Fig. II-2-1-1 (Relationship among the NSS, the NDPG, the MTDP, and the Fiscal Year Budget)

Fig. II-2-1-2 (Outline of the NSS)

Reference 1 (National Security Strategy [Outline])

Fig. II-2-1-1

Relationship among the NSS, the NDPG, the MTDP, and the Fiscal Year Budget

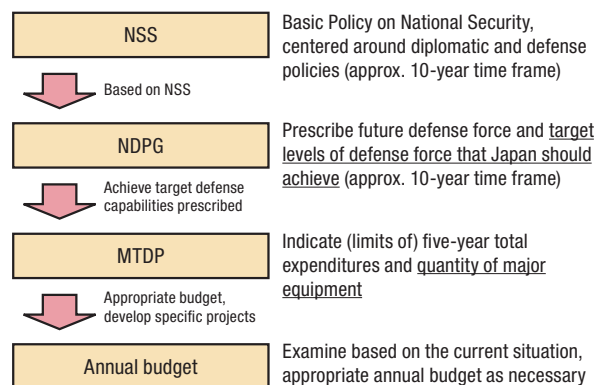


Fig. II-2-1-2

Outline of the NSS

Fundamental Principle of National Security = Proactive Contribution to Peace Based on the Principle of International Cooperation		
National Interests	<ul style="list-style-type: none"> ◇ Maintain Japan's peace and security, and ensure its survival ◇ Consolidate Japan's peace and security ◇ Maintain and protect international order based on universal values and rules 	
Objectives	<ul style="list-style-type: none"> ◇ Reinforce necessary deterrence and prevent direct threats to Japan ◇ Improve the security environment of the Asia-Pacific region, and prevent the emergence of and reduce threats through strengthening the Japan-U.S. Alliance and enhancing the trust and cooperative relationships between Japan and its partners within and outside of the region ◇ Improve the global security environment and build a prosperous international community 	
Japan's Strategic Approaches to National Security		
1	Strengthening and Expanding Japan's Capabilities and Roles	<ul style="list-style-type: none"> ● Strengthen diplomacy ● Build a comprehensive defense architecture ● Strengthen efforts for the protection of Japan's territorial integrity ● Ensure maritime security ● Strengthen cybersecurity ● Strengthen measures against international terrorism ● Enhance intelligence capabilities ● Defense equipment and technology cooperation ● Ensure the stable use of outer space and promote its use for security purposes ● Strengthen technological capabilities
2	Strengthening the Japan-U.S. Alliance	<ul style="list-style-type: none"> ● Further strengthen the security and defense cooperation between Japan and the U.S. ● Ensure a stable presence of the U.S. Forces
3	Strengthening Diplomacy and Security Cooperation with Japan's Partners for Peace and Stability in the International Community	<ul style="list-style-type: none"> ● Enhance the cooperative relations with the ROK, Australia, ASEAN countries, and India ● Establish a "Mutually Beneficial Relationship Based on Common Strategic Interests" with China ● Encourage North Korea to take concrete actions to achieve a comprehensive resolution of outstanding issues of concern, such as the abduction, nuclear and missiles issues ● Advance cooperation with Russia in all areas ● Actively utilize regional and trilateral cooperation frameworks ● Cooperate with partners of the Asia-Pacific region ● Cooperate with countries outside the Asia-Pacific region
4	Proactive Contribution to International Efforts for Peace and Stability of the International Community	<ul style="list-style-type: none"> ● Strengthen diplomacy at the United Nations ● Strengthen the rule of law ● Lead international efforts on disarmament and non-proliferation ● Promote international peace cooperation ● Promote international cooperation against global terrorism
5	Strengthening Cooperation Based on Universal Values to Resolve Global Issues	<ul style="list-style-type: none"> ● Share universal values; address development issues and realize "human security"; cooperate with human resource development efforts in developing countries; maintain and strengthen the free trade system; respond to energy and environmental issues; enhance people-to-people exchanges
6	Strengthening the Domestic Foundation that Supports National Security and Promoting Domestic and Global Understanding	<ul style="list-style-type: none"> ● Maintain and enhance defense production and technological bases ● Boosting communication capabilities ● Social base ● Enhancing the intellectual base

Section 2 Outline of NDPG

Since it was first formulated in 1976, the NDPG has been established six times. The Current NDPG was formulated as “National Defense Program Guidelines for FY2019

and beyond (2018 NDPG)” in December 2018.¹

 Fig. II-2-2-1 (Changes in the NDPG)

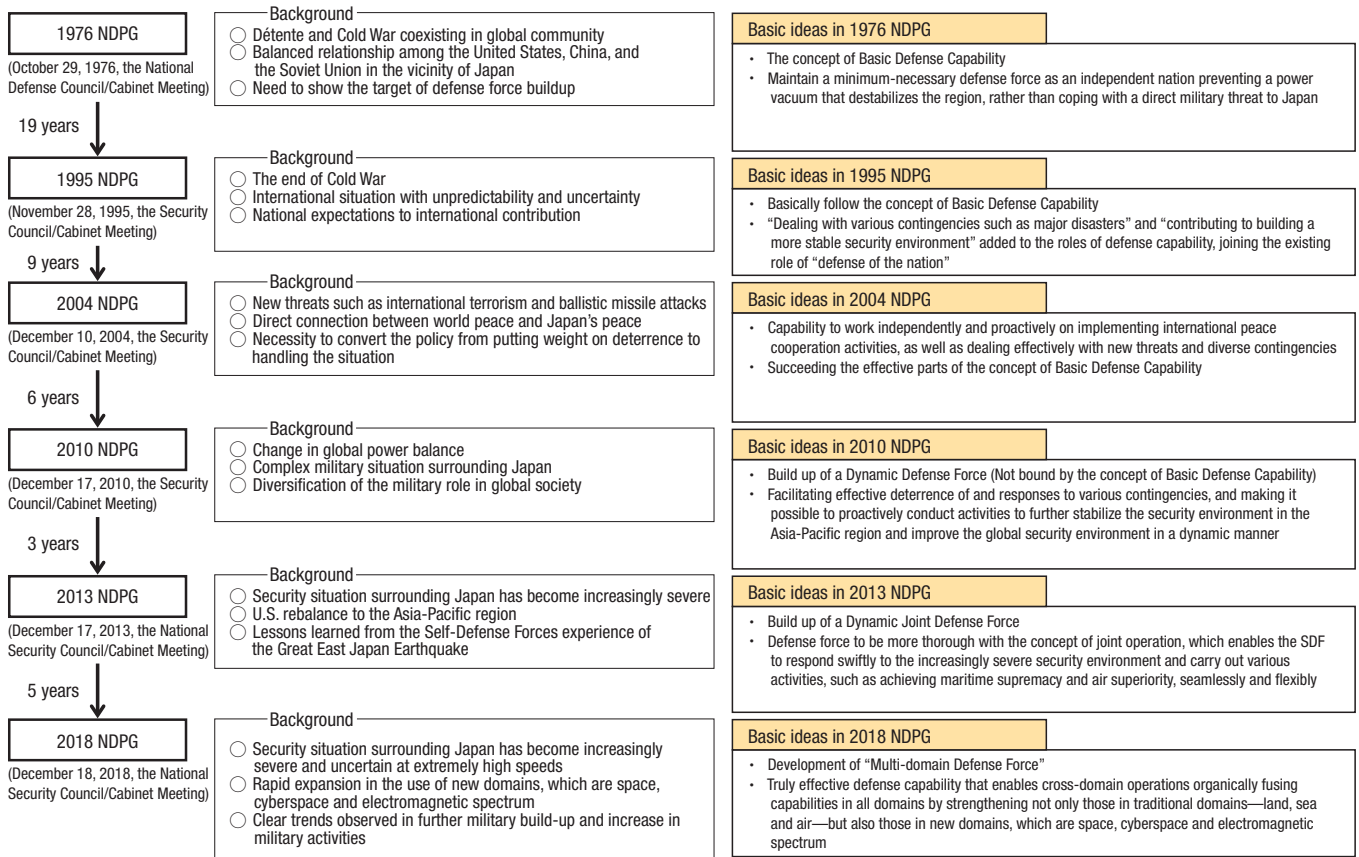
1 Basic Approach—Building a Multi-Domain Defense Force

Japan’s security environment is becoming more testing and uncertain. On such basis, the current NDPG indicates that Japan will build a “Multi-Domain Defense Force” with a truly effective defense capability and the following characteristics.

- (i) Capable of executing cross-domain operations, which organically fuse capabilities in all domains, including space, cyberspace and electromagnetic spectrum, to generate synergy and amplify the overall strength
- (ii) Capable of sustained conduct of flexible and strategic activities during all phases from peacetime to armed contingencies

- (iii) Capable of bolstering the ability of the Japan-U.S. Alliance to deter and counter threats and promoting multi-faceted and multi-layered security cooperation
- In particular, as capabilities in new domains, which are space, cyberspace, and electromagnetic spectrum, could substantially enhance the military’s overall capabilities to conduct operations, states are exerting efforts to improve capabilities in these fields. Japan will also focus on enhancing these capabilities as well as capabilities to effectively counter attacks by aircraft, ships, and missiles in combination therewith, and enhancing the sustainability and resiliency of defense capability, including logistics support.

Fig. II-2-2-1 Changes in the NDPG



¹ The relevant sections of the National Defense Program Guidelines on the land-based Aegis system (Aegis Ashore) were modified by “Procurement of a New Missile Defense System, etc. and Strengthening Stand-off Defense Capability” (approved by the National Security Council and the Cabinet on December 18, 2020)

2 Japan's Basic Defense Policy

The NDPG provides the basic policy of Japan's defense as follows:

1 Basic Policy

From the perspective of “Proactive Contribution to Peace,” Japan has enhanced its diplomatic strength and defense capability. Japan has also promoted cooperative relationships with other countries, with the Japan-U.S. Alliance being a cornerstone. In so doing, Japan under the Constitution has adhered to the basic precept of maintaining the exclusively defense-oriented policy and not becoming a military power that poses a threat to other countries, ensured civilian control of the military, and observed the Three Non-Nuclear Principles. Japan will ever not change the course it has taken to date as a peace-loving nation. Based on this premise, Japan, even amid the realities of a security environment it has hitherto never faced, must strive to preserve national interests—defend to the end Japanese nationals' lives, persons and property, territorial land, waters and airspace, and its sovereignty and independence.

Defense objectives are to create a desirable security environment while deterring threats from reaching, and, should a threat reach Japan, to counter the threat. As means of achieving these objectives, Japan will strengthen: (1) Japan's own architecture for national defense; (2) the Japan-U.S. Alliance; and (3) international security cooperation. These efforts, including achieving superiority in new domains, which are space, cyberspace, and electromagnetic spectrum, must be carried out swiftly and flexibly.

In dealing with the threat of nuclear weapons, U.S. extended deterrence, with nuclear deterrence at its core, is essential: Japan will closely cooperate with the United States. To deal with the threat, Japan will also increase its own efforts. At the same time, Japan will play an active and positive role in nuclear disarmament and non-proliferation.

2 Strengthening Japan's Own Architecture for National Defense

In order to securely achieve national defense objectives, Japan will build a national defense architecture that will, in all phases, integrate the strengths at the nation's

disposal, enabling not only the Ministry of Defense (MOD)/SDF efforts but also coherent, whole-of-government efforts, as well as cooperation with local governments and private entities.

Concerning the strengthening of Japan's defense force, Japan will build a Multi-Domain Defense Force with a truly effective defense capability that can deter and counter qualitatively and quantitatively superior military threats in an increasingly testing security environment. Japan's defense force, consisting of these measures, must fulfill the roles described in Fig. II-2-2-2 (Roles to Be Fulfilled by Defense Force) during peacetime seamlessly and in a combined manner.

 See Fig. II-2-2-2 (Roles to Be Fulfilled by Defense Force)

3 Strengthening the Japan-U.S. Alliance

The Japan-U.S. Security Arrangements constitute a cornerstone for Japan's national security, and the Japan-U.S. Alliance plays a significant role for the peace, stability and prosperity of the international community. In this context, Japan needs to press ahead with such efforts as bolstering the ability of the Japan-U.S. Alliance to deter and counter threats, enhancing and expanding cooperation in a wide range of areas, and steadily implementing measures concerning the stationing of U.S. Forces in Japan.

4 Strengthening Security Cooperation

In line with the vision of a “Free and Open Indo-Pacific,” Japan will strategically promote multifaceted and multilayered security cooperation, taking into account the characteristics and situation specific to each region and country. As part of such efforts, Japan will actively leverage its defense capability to work on defense cooperation and exchanges which include bilateral/multilateral training and exercises, defense equipment and technology cooperation, capacity building assistance, and service-to-service exchanges. Furthermore, Japan will also contribute to address global security challenges. Moreover, in implementing these initiatives, Japan will position the Japan-U.S. Alliance as its cornerstone and will work closely with the countries that share universal values and security interests, through full coordination with its diplomatic policy.


Fig. II-2-2-2 Roles to Be Fulfilled by Defense Force

Role	Outline
From peacetime to "gray-zone" situations	<ul style="list-style-type: none"> The SDF will, in close integration with diplomacy, promote strategic communications including bilateral/multilateral training/exercises and overseas port visits on a steady-state basis. The SDF will conduct persistent intelligence, surveillance and reconnaissance (ISR) activities around Japan. The SDF will prevent the occurrence or escalation of emergencies by employing flexible deterrent options and other measures. The SDF will, in coordination with the police and other agencies, immediately take appropriate measures in response to actions that violate Japan's sovereignty including incursions into its territorial airspace and waters.
Attack against Japan including its remote islands	<ul style="list-style-type: none"> The SDF will quickly maneuver and deploy requisite units to block access and landing of invading forces while ensuring maritime and air superiority. Even when maintaining maritime and air superiority becomes untenable, the SDF will block invading forces' access and landing from outside their threat envelopes. Should any part of the territory be occupied, the SDF will retake it by employing all necessary measures. Against airborne attack by missiles and aircraft, the SDF will respond in a swift and sustained manner by applying optimal means and minimize damage to maintain SDF's capabilities as well as the infrastructure upon which such capabilities are employed. In response to attack by guerrillas or special operations forces, SDF will protect critical facilities including nuclear power plants and search and destroy infiltrating forces.
Space, cyber and electromagnetic domains during all phases	<ul style="list-style-type: none"> To prevent any actions that impede its activities, the SDF will conduct, on a steady-state basis, persistent monitoring as well as collection and analysis of relevant information. In case of an event that impedes its activities, the SDF will promptly take such measures as damage limitation and recovery. In case of armed attack against Japan, the SDF will block and eliminate the attack by leveraging capabilities in space, cyber and electromagnetic domains. SDF will contribute to comprehensive, whole-of-government efforts concerning these domains under appropriate partnership and shared responsibility with relevant organizations.
Large-scale disasters	<ul style="list-style-type: none"> The SDF will swiftly transport and deploy requisite units to take all necessary measures for initial response, and, as required, maintain its posture for disaster response for a longer term. The SDF will carefully address the needs of affected citizens and local governments. The SDF will engage in life saving, temporary repair and livelihood support in appropriate partnership and cooperation with relevant organizations, local governments and the private sector.
Collaboration with the United States based on the Japan-U.S. Alliance	<ul style="list-style-type: none"> In all stages from peacetime to armed contingencies, Japan will effectively conduct activities by playing on its initiative its own roles in the Japan-U.S. Alliance.
Promotion of security cooperation	<ul style="list-style-type: none"> SDF will strategically promote defense cooperation and exchanges such as joint training and exercises, cooperation in defense equipment and technologies, capacity building assistance, and service-to-service exchange.

3 Priorities in Strengthening Defense Capability

For priority capability areas in strengthening defense capability, the NDPG sets forth that Japan will develop those areas as early as possible, allocating resources flexibly and intensively without adhering to existing

budget and human resource allocation, and undertake necessary fundamental reforms.

 See Fig. II-2-2-3 (Priorities in Strengthening Capabilities Necessary for Cross-domain Operations)

4 Organization of the SDF

The NDPG states that, in order to realize cross-domain operations, including in the new domains of space, cyberspace, and electromagnetic spectrum, the SDF will strengthen joint operations and develop the organization of each SDF service.

 See Fig. II-2-2-4 (Strengthening Joint Operations and Developing Organization of Each SDF Service)
Fig. II-2-2-5 (Transition of the NDPG Annex Tables)

5 Elements Supporting Defense Capability

The NDPG sets forth that the initiatives related to elements supporting defense capability will be emphasized in order for Japan's defense capability to demonstrate its true value.

 See Fig. II-2-2-6 (Elements Supporting Defense Capability)

Fig. II-2-2-3

Priorities in Strengthening Capabilities Necessary for Cross-domain Operations

Capabilities that should be acquired and strengthened	Outline
Capabilities in space domain	<ul style="list-style-type: none"> The SDF will improve various capabilities that leverage space domain including information-gathering, communication and positioning capabilities. The SDF will also build a structure to conduct persistent space situation monitoring. To ensure superiority in use of space at all stages from peacetime to armed contingencies, the SDF will work to strengthen capability to disrupt opponent's command, control, communications and information. The SDF will work to enhance cooperation with relevant agencies and with the United States and other relevant countries. The SDF will also engage in the creation of units specializing in space and develop human resources.
Capabilities in cyber domain	<ul style="list-style-type: none"> In order to prevent attack against SDF's command and communications systems and networks, SDF will continue to strengthen capabilities for persistent monitoring of them as well as for damage limitation and recovery in case of attack. The SDF will fundamentally strengthen its cyber defense capability, including capability to disrupt, during attack against Japan, opponent's use of cyberspace for the attack. The SDF will significantly expand its human resources with specialized expertise and skills, and contribute to whole-of-government efforts.
Capabilities in electromagnetic domain	<ul style="list-style-type: none"> The SDF will work to enhance information and communications capabilities as well as information collection and analysis capabilities related to electromagnetics, and develop an information sharing posture. The SDF will improve capabilities to minimize the effect of opponent's electronic jamming. The SDF will strengthen capabilities to neutralize radar and communications of opponent who intends to invade Japan. In order to smoothly perform these activities, the SDF will enhance its ability to appropriately manage and coordinate the use of electromagnetic spectrum.
Capabilities in maritime and air domains	<ul style="list-style-type: none"> The SDF will reinforce its posture for conducting persistent ISR at sea and in the air around Japan. The SDF will also strengthen surface and underwater operational capabilities including Unmanned Underwater Vehicles (UUV). By taking measures such as developing a fighter force structure that features Short Take-Off and Vertical Landing (STOVL) fighter aircraft, the SDF will improve air operation capability particularly on the Pacific side of Japan, where number of air bases is limited despite its vast airspace. Japan will take necessary measures to enable STOVL fighter aircraft to operate from existing SDF ships as required.
Stand-off defense capability	<ul style="list-style-type: none"> The SDF will acquire stand-off firepower and other requisite capabilities to deal with ships and landing forces attempting to invade Japan including remote islands from the outside of their threat envelopes. In order to appropriately leverage advances in military technologies, Japan will swiftly and flexibly strengthen stand-off defense capability through measures such as comprehensive research and development of related technologies.
Comprehensive air and missile defense capability	<ul style="list-style-type: none"> In order to counter diverse airborne threats of ballistic and cruise missiles and aircraft, the SDF will establish a structure with which to conduct integrated operation of various equipment pieces, thereby providing persistent nation-wide protection and also enhancing the capability to simultaneously deal with multiple, complex airborne threats. The SDF will also study ways to counter future airborne threats.
Maneuver and deployment capability	<ul style="list-style-type: none"> Requisite SDF units need to conduct sustained, persistent activities in appropriate areas on a steady-state basis. In order to maneuver and deploy according to situation, the SDF will strengthen amphibious operation and other capabilities. To enable swift and large-scale transport, the SDF will strengthen joint transport capability including inter- and intra-theater transport capabilities tailored to the characteristics of remote island areas. The SDF will also work to collaborate with commercial transport on a steady-state basis.
Sustainability and resiliency	<ul style="list-style-type: none"> The SDF will take necessary measures for securing ammunition and fuel, ensuring maritime shipping lanes, and protecting important infrastructure. In particular, while cooperating with relevant ministries and agencies, the SDF will improve sustainability through safe and steady acquisition and stockpiling of ammunition and fuel. The SDF will also improve resiliency in a multi-layered way through efforts including dispersion, recovery from damage, and substitution of infrastructure and other foundations for SDF operations. Further, the SDF will review existing equipment maintenance methods, thereby ensuring high operational availability.

Fig. II-2-2-4

Strengthening Joint Operations and Developing Organization of Each SDF Service

Organization of SDF, etc.	Summary
Joint operation to realize cross-domain operations	<ul style="list-style-type: none"> SDF will strengthen the necessary posture of the Joint Staff Office in order to further promote the unity of the GSDF, MSDF, and ASDF in all areas. Regarding the space domain, SDF will maintain an ASDF unit that specializes in space domain missions, and strengthen its posture for joint operations. Regarding the cyber domain, SDF will maintain a cyberspace defense unit as an integrated unit in order to fundamentally strengthen cyber defense capability. Regarding the electromagnetic wave domain, SDF will strengthen the posture of the Joint Staff Office and each SDF service. GSDF will maintain surface-to-air guided missile units; MSDF will maintain Aegis-equipped destroyers and Aegis system-equipped vessels; ASDF will maintain surface-to-air guided missile units; and SDF will build comprehensive air and missile defense capability comprising these assets. SDF will maintain a maritime transport unit as an integrated unit that allows SDF units to swiftly maneuver and deploy in joint operations.
Organization of GSDF	<ul style="list-style-type: none"> GSDF will maintain rapidly deployable basic operational units furnished with advanced mobility and ISR capabilities. GSDF will also maintain mobile operating units equipped with specialized functions, in order to effectively perform operations such as various missions in cyber and electromagnetic domains. GSDF will strengthen its ability to deter and counter threats by taking measures including persistent steady-state maneuvers and the stationing of units. To be able to counter invasion of remote islands, GSDF will maintain surface-to-ship guided missile units and hyper-velocity gliding projectile units for remote island defense. GSDF will review their organization and equipment with focus on tanks, howitzers and rockets. GSDF will also review their organization and equipment related to aerial firepower, and thoroughly implement rationalization and streamlining of these units and appropriately position them to meet conditions and characteristics of each region. The authorized number of personnel will be maintained at 159,000.
Organization of MSDF	<ul style="list-style-type: none"> MSDF will maintain reinforced destroyer units including destroyers with improved multi-mission capabilities, minesweeper units and embarked patrol helicopter units, and organize surface units composed of these units. MSDF will maintain patrol ship units to enable enhanced steady-state ISR in the waters around Japan. MSDF will maintain reinforced submarine units for underwater ISR as well as patrols and defense in the waters around Japan. By introducing a test-bed submarine, MSDF will work to achieve greater efficiency in submarine operations and accelerate capability improvement, thereby enhancing persistent ISR posture. In order to effectively conduct steady-state, wide-area airborne ISR, and to effectively engage in patrols and defense in the waters around Japan, MSDF will maintain fixed-wing patrol aircraft units.
Organization of ASDF	<ul style="list-style-type: none"> ASDF will maintain air warning and control units consisting of ground-based warning and control units and reinforced airborne warning units: ground-based warning and control units are capable of conducting persistent surveillance in vast airspace on the Pacific side, and airborne warning units are capable of conducting effective, sustained airborne warning, surveillance and control during situations with heightened tensions. ASDF will maintain reinforced fighter aircraft units, and aerial refueling and transport units. In order to be able to effectively carry out activities such as maneuver and deployment of ground forces, ASDF will maintain air transport units. In order to be able to conduct information collection in areas that are relatively remote for Japan and persistent airborne monitoring during situations with heightened tensions, ASDF will maintain unmanned aerial vehicle units.

Fig. II-2-2-5 Transition of the NDPG Annex Tables

	Category	1976 NDPG	1995 NDPG	2004 NDPG	2010 NDPG	2013 NDPG	2018 NDPG	
Joint Units	Cyber Defense Units						1 squadron	
	Maritime Transport Units						1 group	
GSDF	Authorized Number of Personnel	180,000	160,000	155,000	154,000	159,000	159,000	
	Active-Duty Personnel		145,000	148,000	147,000	151,000	151,000	
	Ready Reserve Personnel		15,000	7,000	7,000	8,000	8,000	
	Major Units	Regional Deployment Units ¹	12 divisions 2 combined brigades	8 divisions 6 brigades	8 divisions 6 brigades	8 divisions 6 brigades	5 divisions 2 brigades	5 divisions 2 brigades
		Rapid Deployment Units	1 armored division 1 artillery brigade 1 airborne brigade 1 training group 1 helicopter brigade	1 armored division 1 airborne brigade 1 helicopter brigade	1 armored division Central Readiness Force	Central Readiness Force 1 armored division	3 rapid deployment divisions 4 rapid deployment brigades 1 armored division 1 airborne brigade 1 amphibious rapid deployment brigade 1 helicopter brigade	3 rapid deployment divisions 4 rapid deployment brigades 1 armored division 1 airborne brigade 1 amphibious rapid deployment brigade 1 helicopter brigade
		Surface-to-Ship Guided Missile Units					5 surface-to-ship guided missile regiments	5 surface-to-ship guided missile regiments
		Hyper Velocity Gliding Projectile Intended for the Defense of Remote Islands Units						2 battalions
		Surface-to-Air Guided Missile Units	8 anti-aircraft artillery groups	8 anti-aircraft artillery groups	8 anti-aircraft artillery groups	7 anti-aircraft artillery groups/regiments	7 anti-aircraft artillery groups/regiments	7 anti-aircraft artillery groups/regiments
		Ballistic Missile Defense Units						2 squadrons ⁸
		Tanks ² Artillery (Main artillery) ²	(approx. 1,200) (approx. 1,000/vehicle)	approx. 900 (approx. 900/vehicle)	approx. 600 (approx. 600/vehicle)	approx. 400 approx. 400/vehicle	(approx. 300) (approx. 300/vehicle)	(approx. 300) (approx. 300/vehicle)
MSDF	Major Units	Destroyers				4 flotillas (8 divisions) 4 flotillas	4 flotillas (8 divisions) 6 flotillas	4 groups (8 divisions)
		Destroyer and minesweeper vessels For mobile operations ⁷ Regional deployment ⁷	4 flotillas (Regional units) 10 units	4 flotillas (Regional units) 7 units	4 flotillas (8 divisions) 5 divisions			2 groups (13 divisions)
		Submarine Units	6 divisions	6 divisions	4 divisions	6 divisions	6 divisions	6 divisions
		Minesweeper Units Patrol Aircraft Units	2 flotillas (Land-based) 16	1 flotilla (Land-based) 13	1 flotilla 9 squadrons	1 flotilla 9 squadrons	1 flotilla 9 squadrons	1 flotilla 9 squadrons
Major Equipment	Major Equipment	Destroyers	approx. 60	approx. 50	47	48	54	54
		Submarines Patrol vessels Combat aircraft	16 approx. 220	16 approx. 170	16 approx. 150	22 approx. 150	22 approx. 170	22 approx. 190
ASDF	Major Units	Air Warning & Control Units	28 warning groups 1 squadron	8 warning groups 20 warning squadrons 1 squadron	8 warning groups 20 warning squadrons 1 AEW group (2 squadrons)	4 warning groups 24 warning squadrons 1 AEW group (2 squadrons)	28 warning squadrons 1 AEW group (3 squadrons)	28 warning squadrons 1 AEW wing (3 squadrons)
		Fighter Aircraft Units			12 squadrons	12 squadrons	13 squadrons	13 squadrons ⁶
		Fighter-Interceptor Units Support Fighter Units	10 squadrons 3 squadrons	9 squadrons 3 squadrons				
		Air Reconnaissance Units	1 squadron	1 squadron	1 squadron	1 squadron		
		Aerial Refueling/Transport Units			1 squadron	1 squadron	2 squadrons	2 squadrons
		Air Transport Units	3 squadrons	3 squadrons	3 squadrons	3 squadrons	3 squadrons	3 squadrons
		Surface-to-Air Guided Missile Units	6 fire groups	6 fire groups	6 fire groups	6 fire groups	6 fire groups	4 fire groups (24 fire squadrons)
	Space Domain Mission Units						1 squadron	
	Unmanned Aerial Vehicle Units						1 squadron	
	Major Equipment	Major Equipment	Combat aircraft (Fighters)	approx. 430 (approx. 350) ³	approx. 400 approx. 300	approx. 350 approx. 260	approx. 340 approx. 260	approx. 360 approx. 280
Major Equipment/Units that may also serve for BMD missions ⁴	Major Equipment/Units that may also serve for BMD missions ⁴	Aegis-equipped Destroyers			4 ships	6 ships ⁵	8 ships	8 ships
		Air Warning & Control Units Surface-to-Air Guided Missile Units			7 warning groups 4 warning squadrons 3 groups	11 warning groups/units 6 groups		

- Notes: 1. Units that were categorized as those deployed in a steady state (peacetime) until 2010 NDPG
2. Data on tanks and artillery were not included in 1976 NDPG, 2013 NDPG and 2018 NDPG, but are shown here for making comparisons with Annex Tables for 1995 NDPG up to 2010 NDPG.
3. Data on fighters were not included in 1976 NDPG but are shown here for making comparisons with Annex Tables for 1995 NDPG up to 2018 NDPG.
4. Major equipment/units that may also serve for BMD missions were included in MSDF's major equipment or ASDF's major units in 2004 NDPG and 2010 NDPG, but those newly procured are included in the categories of Aegis-equipped destroyers, Air Warning & Control Units, and Surface-to-Air Guided Missile Units in 2013 NDPG and 2018 NDPG.
5. In 2010 NDPG, Aegis-equipped destroyers with BMD functions were allowed to be additionally procured within the limited number of destroyers above, when separately determined in light of the progress in BMD technologies and financial circumstances.
6. Including Fighter Aircraft Units consisting of STOVL aircraft
7. Destroyers were expressed as Anti-submarine Surface Units (for mobile operations) or Anti-submarine Surface Units (regional units) in 1976 NDPG, as Destroyers (for mobile operations) or Destroyers (regional units) in 1995 NDPG, and as Destroyers (for mobile operations) or Destroyers (regional deployment) in 2004 NDPG.
8. While the plan was to prepare two land-based Aegis systems (Aegis Ashore) and maintain two ballistic missile defense units, as of the Cabinet decision in December 2020, the land-based Aegis System (Aegis Ashore) will be replaced by two Aegis system-equipped vessels, which will be maintained by the MSDF.

Fig. II-2-2-6 Elements Supporting Defense Capability

Element	Outline
Training and exercises	<ul style="list-style-type: none"> ● The SDF will expand the establishment and utilization of the domestic training areas and conduct effective training and exercises. ● The SDF will facilitate joint/shared use of U.S. Forces facilities and areas. ● The SDF will facilitate the use of places other than SDF facilities or U.S. Forces facilities and areas and the utilization of excellent training environments overseas such as the United States and Australia. ● The MOD/SDF will reinforce coordination with relevant agencies including police, firefighters, and the Japan Coast Guard.
Medical Care	<ul style="list-style-type: none"> ● The MOD/SDF will strengthen its posture for medical care and onward transfer of patients, seamlessly covering the entire stretch between the frontline and final medical evacuation destinations. ● The SDF will establish an efficient and high-quality medical system through endeavors such as upgrading of SDF hospitals into medical hubs with enhanced functions. ● The SDF will proceed to improve the management of the National Defense Medical College, enhance its research functions and strive to secure high-quality talents, as well as striving to better secure the number of medical officers.
Collaboration with Local Communities	<ul style="list-style-type: none"> ● The MOD/SDF will constantly and actively engage in public relations activities regarding defense policies and activities, and will make careful, detailed coordination to meet desires and conditions of local communities. ● Upon reorganization of operation units as well as placement of SDF garrisons and bases, the MOD/SDF will give due considerations to local conditions and characteristics, so as to be able to gain the understanding of the local governments and residents.
Intellectual Base	<ul style="list-style-type: none"> ● The MOD/SDF will strive to dispatch instructors to educational institutions and hold public symposiums so as to enable the public to recognize knowledge and information about securities policies accurately, and will also endeavor to provide efficient and highly trustworthy information. ● The MOD/SDF will expand networks and institutional collaboration with research and education organizations, universities, and think-tanks in Japan and abroad in order to further strengthen the research system of the MOD/SDF with the National Institute for Defense Studies playing central roles.


Section 3

Outline of the MTDP (FY2019–FY2023)

1 Program Guidelines


The current MTDP formulated in December 2018 indicates that the SDF will endeavor to build up defense capability based on the five basic policies, in accordance with the NDPG.¹

Specifically, the SDF will strengthen its structure and capability based on the “Priorities in Strengthening Defense Capabilities” and “Structure of the SDF” of the NDPG.

 Fig. II-2-2-3 (Priorities in Strengthening Capabilities Necessary for Cross-domain Operations)
 Fig. II-2-3-1 (Five Basic Policies of the MTDP)
 Fig. II-2-3-2 (Projects pertaining to the Priorities in Strengthening Capabilities Essential for Cross-domain Operations)

2 Quantities of Major Procurement

The Annex Table of the MTDP (FY2019–FY2023) shows details of the quantities of major equipment items procured.

 Fig. II-2-3-3 (Annex Table of the MTDP [FY2019–FY2023] and Unit Prices of the Equipment Items Listed on the Annex Table of the MTDP [FY2019–FY2023])

3 Expenditures

The expenditure target for the implementation of the defense capability build-up described in the MTDP (FY2019–FY2023) amount to approximately ¥27.47 trillion in FY2018 prices.

Substantive funds will be secured by such means as thoroughly ensuring greater efficiency and streamlining

in defense force development, optimizing equipment procurement through the efficient acquisition of equipment, and securing other revenue. The annual defense budgets target for the implementation of this MTDP is expected to be around approximately ¥25.5 trillion over the five years.

Fig. II-2-3-1 Five Basic Policies of the MTDP

Five Basic Policies of the MTDP in accordance with the NDPG	
1	<p>Acquiring and Strengthening Capabilities Essential for Realizing Cross-domain Operations</p> <ul style="list-style-type: none"> The SDF will acquire and strengthen capabilities in new domains, which are space, cyberspace and electromagnetic spectrum. The SDF will strengthen and protect command, control, communications and information (C4I) capabilities that effectively connect capabilities in all domains including the new ones. The SDF will enhance capabilities in traditional domains, such as capabilities in maritime and air domains, stand-off defense capability, comprehensive air and missile defense capability and maneuver and deployment capability. The SDF will enhance sustainability and resiliency of defense capability including logistics support.
2	<p>Improving the Efficiency of Acquisition of Equipment and Reinforcing the Technology Base</p> <ul style="list-style-type: none"> In procuring equipment, by properly combining the introduction of new, high performance equipment, with life extension and improvement of existing equipment, the MOD/SDF will efficiently secure defense capability in necessary and sufficient “quality” and “quantity.” The MOD/SDF will strive to reduce the life-cycle costs and improve cost-effectiveness by reinforcing project management. The MOD/SDF will make focused investments through selection and concentration in cutting-edge technologies. The MOD/SDF will also dramatically shorten R&D timelines by streamlining its processes and procedures.
3	<p>Reinforcing Human Resource Base</p> <ul style="list-style-type: none"> The MOD/SDF will comprehensively promote various measures to reinforce human resource base such as securing diverse and high-quality talents including diversifying applicant pool, promoting women’s participation and leveraging SDF Reserve Personnel, improving living and work environment, promoting work style reforms, and improving treatment, etc.
4	<p>Strengthening the Japan-U.S. Alliance and Security Cooperation</p> <ul style="list-style-type: none"> Japan will further promote a variety of cooperative activities and consultations with the United States, in a wide range of areas under “Guidelines for Japan-U.S. Defense Cooperation.” Japan will also actively facilitate measures for the smooth and effective stationing of U.S. forces in Japan. In line with the vision of Free and Open Indo-Pacific, to strategically promote multifaceted and multilayered security cooperation, Japan will promote defense cooperation and exchanges which include bilateral training and exercises, defense equipment and technology cooperation, capacity building assistance, and interchanges among military branches.
5	<p>Greater Efficiency and Streamlining in the Build-Up of Defense Capability</p> <ul style="list-style-type: none"> With respect to hedging against invasion scenarios such as amphibious landing employing large-scale ground forces, the SDF will retain forces only enough to maintain and carry on the minimum necessary expertise and skills, by achieving efficiency and rationalization. Considering increasingly severe fiscal conditions and the importance of other budgets related to people’s daily life, the MOD/SDF will work to achieve greater efficiency and streamlining in defense force development while harmonizing with other policies and measures of the Government.

¹ The relevant sections of the MTDP on the land-based Aegis system (Aegis Ashore) were modified by “Procurement of a New Missile Defense System, etc. and Strengthening Stand-off Defense Capability” (approved by the National Security Council and the Cabinet on December 18, 2020).

Fig. II-2-3-2

Projects pertaining to the Priorities in Strengthening Capabilities Essential for Cross-domain Operations

Category		Main Programs
Space, cyber and electromagnetic domains	Space domain	○ Establishment of Space Operations Squadron ○ Development of the Space Situational Awareness System
	Cyber domain	○ Enhancement of structure for Cyber Defense Group, etc. ○ Improvement of the survivability of SDF's command and communications systems and networks
	Electromagnetic domain	○ Establishment of new specialized units in internal subdivisions and the Joint Staff Office ○ Installation of electronic data collectors and ground radio wave measuring apparatuses
Traditional domains	Maritime and air domains	○ Procurement of new types of destroyers (FFM), submarines, patrol vessels, fixed-wing patrol aircraft (P-1), patrol helicopters (SH-60K, SH-60K upgraded capability), and carrier-borne unmanned aerial vehicles ○ Increase of F-35A, introduction of F-35B, refurbishment of Izumo-type destroyers, and enhancement of abilities of F-15
	Stand-off defense capability	○ Procurement of stand-off missiles (JSM, JASSM, and LRASM) ○ Promotion of R&D concerning hyper velocity gliding projectiles intended for the defense of remote islands
	Comprehensive air and missile defense capability	○ Enhancement of abilities of Aegis destroyers and Patriot surface-to-air guided missiles
	Maneuver and deployment capability	○ Procurement of transport aircraft (C-2) and transport helicopters (CH-47JA), and introduction of new utility helicopters ○ Promotion of efforts to obtain cooperation from related local governments for permanent deployment of GSDF Osprey aircraft (V-22) to Kyushu Saga International Airport
Strengthening sustainability and resiliency	Securing continuous operations	○ Preferential procurement of anti-aircraft missiles, torpedoes, stand-off firepower, and interceptor missiles for ballistic missile defense ○ Promotion of efforts for dispersion, recovery from damage, and substitution of infrastructure and other foundations for the SDF operations
	Ensuring the operational availability of equipment	○ Securing of a sufficient budget for maintenance of equipment ○ Expansion of PBL (Performance Based Logistics) and other umbrella contracts

Fig. II-2-3-3

Annex Table of the MTDP (FY2019-FY2023) and Unit Prices of the Equipment Items Listed on the Annex Table of the MTDP (FY2019-FY2023)

Annex Table of the MTDP (FY2019-FY2023)			Unit Prices of the Equipment Items Listed on the Annex Table of the MTDP (FY2019-FY2023)
Service	Equipment	Quantity	Unit prices (*1)
GSDF	Mobile Combat Vehicles	134	Approx. 0.8 billion yen
	Armored Vehicles	29	(*2)
	New Utility Helicopters	34	Approx. 1.8 billion yen
	Transport Helicopters (CH-47JA)	3	Approx. 8.9 billion yen
	Surface-to-Ship Guided Missiles	3 companies (*3)	Approx. 5.6 billion yen (*4)
	Mid-Range Surface-to-Air Guided Missiles	5 companies	Approx. 14.3 billion yen (*4)
	Land-based Aegis Systems (Aegis Ashore)	2	Approx. 122.4 billion yen (*8)
	Tanks	30	Approx. 1.5 billion yen
	Howitzers (excluding mortars)	40	Approx. 0.7 billion yen
MSDF	Destroyers	10	Approx. 47.6 billion yen
	Submarines	5	Approx. 64.7 billion yen
	Patrol Vessels	4	(*2)
	Other Ships	4	(*5)
	Total (Tonnage)	23 (Approx. 66,000 tons)	—
	Fixed-Wing Patrol Aircraft (P-1)	12	Approx. 22.1 billion yen
	Patrol Helicopters (SH-60K/K (Upgraded Capability))	13	Approx. 7.3 billion yen (*2)
	Ship-Borne Unmanned Aerial Vehicles	3	(*2)
	Minesweeping and Transport Helicopters (MCH-101)	1	Approx. 7.3 billion yen
ASDF	Airborne Early Warning (Control) Aircraft (E-2D)	9	Approx. 26.2 billion yen
	Fighters (F-35A)	45	Approx. 11.6 billion yen
	Fighter Upgrade (F-15)	20	Approx. 3.5 billion yen
	Aerial Refueling/Transport Aircraft (KC-46A)	4	Approx. 24.9 billion yen
	Transport Aircraft (C-2)	5	Approx. 22.3 billion yen
	Upgrade of PATRIOT Surface-to-Air Guided Missiles (PAC-3 MSE)	4 groups (16 fire squadrons)	Approx. 4.5 billion yen (*6)
	Unmanned Aerial Vehicles (Global Hawk)	1	Approx. 17.3 billion yen (*7)

1. Japan will basically pursue the establishment of 75 Patrol Helicopters and 20 Ship-borne UAVs at the completion of the "NDPG for FY2019 and beyond", but those exact numbers will be considered during the period of the "MTDP (FY2019-FY2023)."

2. 18 aircraft out of 45 aircraft of Fighters (F-35A) would have STOVLs.

*1 Prices are on a contract basis (prices for FY2018) and are the MOD's estimates as of the time of establishing the MTDP.

*2 Information on equipment items under development and equipment items, etc. subject to model selection (including STOVL fighter aircraft) is not disclosed, as information disclosure may affect the proper acquisition of these equipment items in the future.

*3 The quantity of surface-to-ship guided missiles includes that of improved ones under development.

*4 Regarding surface-to-ship guided missiles and mid-range surface-to-air guided missiles, the maximum unit prices are indicated, as unit prices vary by acquisition year due to differences in components.

*5 Other ships are minesweeping vessels, ocean surveillance ships, and oceanographic research ships, and their unit prices are approximately 16.2 billion yen, 22.1 billion yen, and 20.3 billion yen, respectively.

*6 Assembly cost for 16 fire squadrons is scheduled to be allocated during the period of the MTDP. The unit price above is for one fire squadron.

*7 Assembly cost for one Global Hawk is scheduled to be allocated during the period of the MTDP.

*8 As a result of the Cabinet decision in December 2020, the land-based Aegis system (Aegis Ashore) will be replaced by two Aegis system-equipped vessels, which will be maintained by the MSDF. More details, including additional functions and design features, on the vessels will continue to be discussed with necessary measures taken.

Concerning the budgetary process for each fiscal year, in order to adapt to changes in the security environment, Japan must strengthen its defense capability at speeds that are different from the past. Moreover, to achieve rapid procurement of defense equipment, Japan must pursue flexible and swift project management, and the budgetary process for each fiscal year which will be conducted taking into account the economic and fiscal conditions among other budgets.

The amount of expenses based on contracts (material expenses) to be newly concluded to implement this MTDP will be allocated within the ceiling of approximately ¥17.17 trillion in FY2018 prices (excluding the amount corresponding to payments outside of the program period for contracts that contribute to improving project efficiency such as maintenance), and the future obligation shall be managed appropriately.

Column

Establishment of the Space Operations Group (tentative name)

May 18, 2020, saw the establishment of the Space Operations Squadron, the SDF's first space domain mission unit. The squadron is working to develop a system that will contribute to ensuring the stable use of space, including space situational awareness (SSA).

Prior to the start of full-scale SSA operations and the introduction of equipment, the squadron is working on issues such as the operation of units in space, developing human resources with knowledge of space, and building a cooperative system with the United States. Specifically, while taking measures to prevent the spread of COVID-19, it is steadily acquiring space-related knowledge and skills through training commissioned in Japan, online training commissioned in the United States, and participation in exercises using space simulators. In preparation for the full-scale launch of the aforementioned SSA operations, it will also use its knowledge and skills to study system operation procedures alongside procedures for cooperating with the United States military and related organizations. It also conducted training in cooperation with the United States military on SSA during the Japan-U.S.

Bilateral Joint Exercise "Keen Sword 21 (FTX)" to improve interoperability.

The Air Self-Defense Force's space initiatives have just begun, and the personnel who belong to this new squadron need to acquire new knowledge and skills. However, even though they are confronted with complex theories and an enormous amount of work, every day is a series of new discoveries, and they feel it is a fun and challenging unit.

In 2021, in addition to the Space Operations Squadron, a new unit will be formed that is responsible for commanding and controlling the planning and execution of a variety of space-based actions. A new Space Operations Group (tentative name) will be established to act as an upper tier to these units. It is hoped this will enable research on operations in space and the required human resources development to be performed in a more organized manner.

As a unit that specializes in space domain missions, it will continue to conduct required training, placing it in the perfect position to commence full-scale SSA operations.



Exchange with the U.S. Forces Japan



Japan-U.S. Bilateral Joint Exercise "Keen Sword 21 (FTX)"

Organizations Responsible for Japan's Security and Defense

Section 1

National Security Council

As the security environment surrounding Japan grows increasingly testing, Japan faces mounting security challenges that it needs to address. Under such circumstances, it is necessary to carry forward the policies pertaining to national security from a strategic perspective under strong political leadership with the Prime Minister at its core. For this reason, the National Security Council was established in the Cabinet to provide a platform to discuss important matters with regard to Japan's security, and has been serving as a control tower for foreign and defense policies. Since its establishment in December 2013, the Council has met 255 times (as of the end of March 2021). The National Security Strategy (NSS) and the National Defense Program Guidelines for FY2019 and beyond (NDPG) are also deliberated and approved in this National Security Council.

The National Security Secretariat established within the Cabinet Secretariat provides constant support to the National Security Council as its secretariat. The Secretariat is also tasked with planning and designing, and overall coordination of basic guidelines and important matters with regard to foreign and defense policies pertaining to national security. Administrative organs that are deeply involved in policies support the Secretariat with

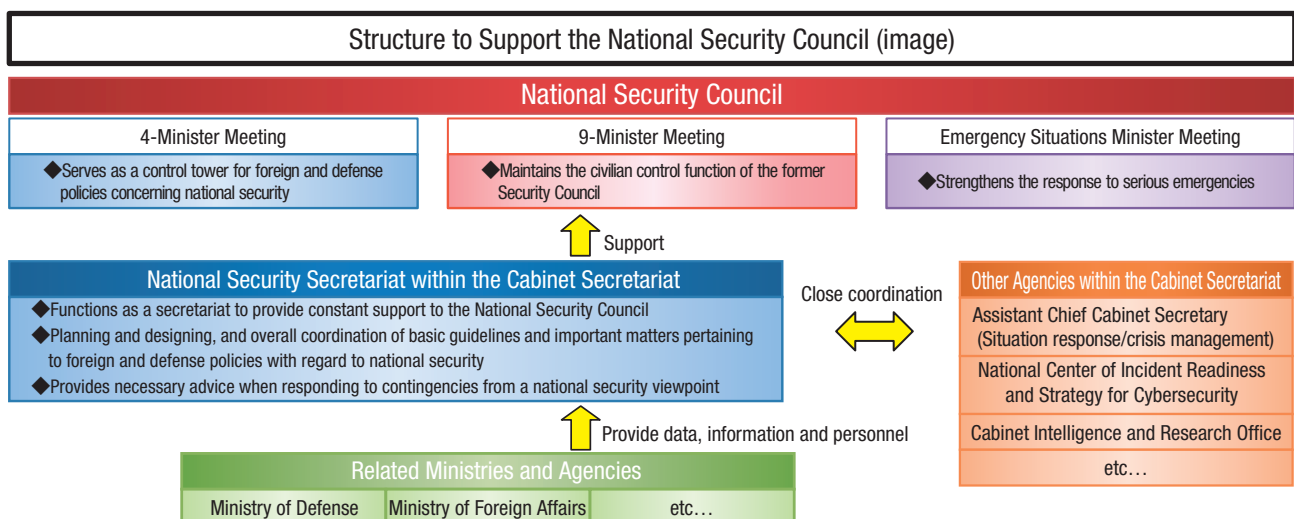
both personnel and information. Considering that the coverage of security has been expanding to the economic and technology fields in recent years, in order to address challenges to the national security in the economic field, "Economy Group" was set up in the Secretariat in April 2020. The Secretariat has many civilians and uniformed personnel of the Ministry of Defense (MOD) with concurrent posts, who are engaged in the planning and designing of policies, as well as the utilization of respective specialized knowledge. In addition, global military trends and other information are shared in a timely manner.

The enhanced ability to formulate national security policies has led to the systematic alignment of Japan's national security, and to the provision of a direction for policies with regard to new security challenges. Furthermore, individual defense policies are formulated and efforts to accelerate decision-making are made based on the basic guidelines discussed at the National Security Council, and this is contributing significantly to improved development and implementation of policies within the MOD.

 See Fig. II-3-1 (Organization of the National Security Council)

Fig. II-3-1

Organization of the National Security Council



Section 2

Organization of the MOD/Self-Defense Forces (SDF)

1 Organizational Structure Supporting Defense Capability

1 Organization of the MOD/SDF

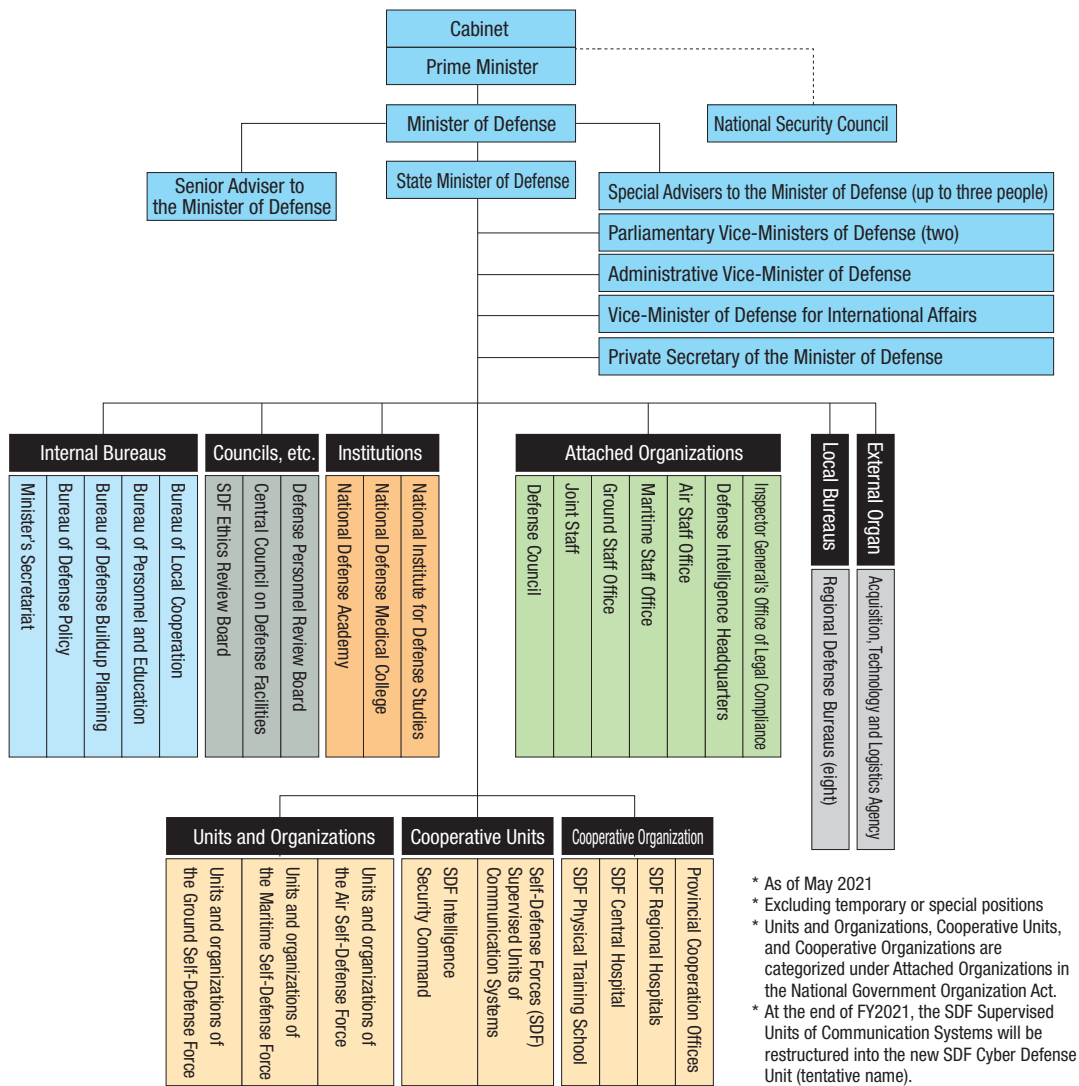
To fulfill their mission of defending Japan, the MOD/SDF¹ consists of various organizations, mainly the Ground, Maritime, and Air Self-Defense Forces as armed forces.

- See Fig. II-3-2-1 (Organizational Chart of the MOD/SDF)
- Fig. II-3-2-2 (Outline of the MOD/SDF)
- Fig. II-3-2-3 (Organizational Diagram of the Self-Defense Forces)
- Fig. II-3-2-4 (Location of Principal SDF Units [for illustrative purposes] [As of March 31, 2021])

2 Systems to Support the Minister of Defense

The Minister of Defense takes charge of and manages the matters related to the defense of Japan as the competent minister, and is in overall charge of the SDF duties in accordance with the provisions of the SDF Law. The Minister is supported by the State Minister of Defense, the Parliamentary Vice-Ministers of Defense (two) and the Senior Adviser to the Minister of Defense. There are also the Special Advisers to the Minister of Defense, who advise the Minister of Defense, and the Defense Council,

Fig. II-3-2-1 Organizational Chart of the MOD/SDF



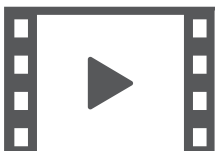
* As of May 2021
 * Excluding temporary or special positions
 * Units and Organizations, Cooperative Units, and Cooperative Organizations are categorized under Attached Organizations in the National Government Organization Act.
 * At the end of FY2021, the SDF Supervised Units of Communication Systems will be restructured into the new SDF Cyber Defense Unit (tentative name).

¹ The MOD and the SDF form a single organization. Whereas the term "Ministry of Defense" refers to the administrative aspects of the organization, which manages and operates the GSDF, MSDF, and ASDF, the term "SDF" refers to the operational aspects of the organizations whose mission is the defense of Japan.

Fig. II-3-2-2

Outline of the MOD/SDF

Organization	Outline
Internal Bureaus	<ul style="list-style-type: none"> Responsible for basic policy relating to the duties of the SDF (defense and security affairs, basic conduct of the SDF [political and administrative affairs such as planning and drafting of laws and regulations or government-level policies], personnel affairs, budgets, etc.) Composed of the Bureau of Defense Policy, Bureau of Defense Buildup Planning, Bureau of Personnel and Education, and Bureau of Local Cooperation, in addition to the Minister's Secretariat (Organization names are as they were at the end of May 2021)
Joint Staff (JS)	<ul style="list-style-type: none"> A staff organization for the Minister of Defense concerning the operation of the SDF Responsible for making plans on defense and security affairs concerning joint operation and making action plans The Minister's commands concerning the operations of the SDF are delivered through the Chief of Staff, JS and orders concerning operations of the SDF are executed by the Chief of Staff, JS.
Ground Staff Office Maritime Staff Office Air Staff Office	<ul style="list-style-type: none"> Staff organizations for the Minister of Defense concerning the duties of each SDF unit Responsible for making plans on defense and security affairs of each SDF unit and making plans on buildup of defense capabilities, education and training, etc.
GSDF	<ul style="list-style-type: none"> Ground Component Command <ul style="list-style-type: none"> Composed mainly of Airborne Brigades, Amphibious Rapid Deployment Brigades, etc. Assumes unified command over GSDF troops. Regional Armies <ul style="list-style-type: none"> Composed of multiple divisions and brigades, and other directly controlled units (such as engineer brigades and antiaircraft artillery groups) There are five regional armies, each mainly in charge of the defense of their respective regions Divisions and Brigades <ul style="list-style-type: none"> Composed of combat units, combat support units, logistics support units and others
MSDF	<ul style="list-style-type: none"> Self-Defense Fleet <ul style="list-style-type: none"> Consists of key units such as the Fleet Escort Force, the Fleet Air Force (consisting of fixed-wing patrol aircraft units and such), and the Fleet Submarine Force Responsible for the defense of sea areas surrounding Japan primarily through mobile operations Regional Districts <ul style="list-style-type: none"> There are five regional districts who mainly protect their responsible territories and support the Self-Defense Fleet
ASDF	<ul style="list-style-type: none"> Air Defense Command <ul style="list-style-type: none"> Composed of four air defense forces Primarily responsible for general air defense duties Air Defense Force <ul style="list-style-type: none"> Composed of key units such as air wings (including fighter aircraft units and others), the Aircraft Control and Warning Wing (including aircraft warning and control units), and Air Defense Missile Groups (including surface-to-air guided missile units and others)
National Defense Academy of Japan	<ul style="list-style-type: none"> An institution for the cultivation of future SDF personnel Offers a science and engineering postgraduate course and a comprehensive security postgraduate course equivalent to master's or doctoral degree from a university (undergraduate and postgraduate courses)
National Defense Medical College	<ul style="list-style-type: none"> An institution for the cultivation of future SDF medical personnel An institution for the cultivation of future SDF officers who are public nurses, nurses, and SDF engineering personnel Offers a medical course that complies with PhD programs for general medical universities
National Institute for Defense Studies	<ul style="list-style-type: none"> Organization that functions as a "think tank" of the Ministry of Defense Conducts basic research and studies related to the administration and operation of the SDF <ul style="list-style-type: none"> Conducts research and studies on security Conducts research and compiles data on military history Management and publication of data on military history Educates and trains SDF personnel and other senior officials
Defense Intelligence Headquarters	<ul style="list-style-type: none"> Central intelligence organization of the Ministry of Defense, which collects, analyzes and reports on information related to Japan's national security <ul style="list-style-type: none"> Collects various military information including imagery and geographical information, signal data, and publicized information; comprehensively analyzes and assesses the information; and provides intelligence to related organizations within the ministry and relevant ministries and agencies Consists of the Directorate for Administration, Directorate for Planning, Directorate for Joint Intelligence, Directorate for Assessment, Directorate for Geospatial Intelligence, and Directorate for Signal Intelligence, as well as six communication sites
Inspector General's Office of Legal Compliance	<ul style="list-style-type: none"> Organization that inspects overall tasks of the Ministry of Defense and the SDF from an independent position
Regional Defense Bureau (eight locations nationwide)	<ul style="list-style-type: none"> Local Bureaus in charge of comprehensive defense administration in regional areas <ul style="list-style-type: none"> Ensures understanding and cooperation of local public organizations, and conducts cost audit, supervision, and inspection related to acquisition of defense facilities, management, construction, taking measures concerning neighborhood of the base, and procurement of equipment Consists of eight Regional Defense Bureaus (Hokkaido, Tohoku, North Kanto, South Kanto, Kinki-Chubu, Chugoku-Shikoku, Kyushu and Okinawa)
Acquisition, Technology and Logistics Agency	<ul style="list-style-type: none"> An external bureau in charge of effective and efficient procurement of defense equipment and international defense equipment and technology cooperation <ul style="list-style-type: none"> Implementation of constant project management throughout the life cycle of defense equipment from an integrated perspective Smooth and prompt reflection of each unit's operational needs in equipment procurement Proactive initiatives in new areas (further internationalization of defense equipment and investments in advanced technological research, etc.) Achievement of procurement reform and maintenance and strengthening of the defense technological and industrial bases at the same time



Video: Overview of SDF activities (record of 2020 by the MOD)
URL: <https://youtu.be/4u8Ua240y6Q>

Fig. II-3-2-3 Organizational Diagram of the Self-Defense Forces

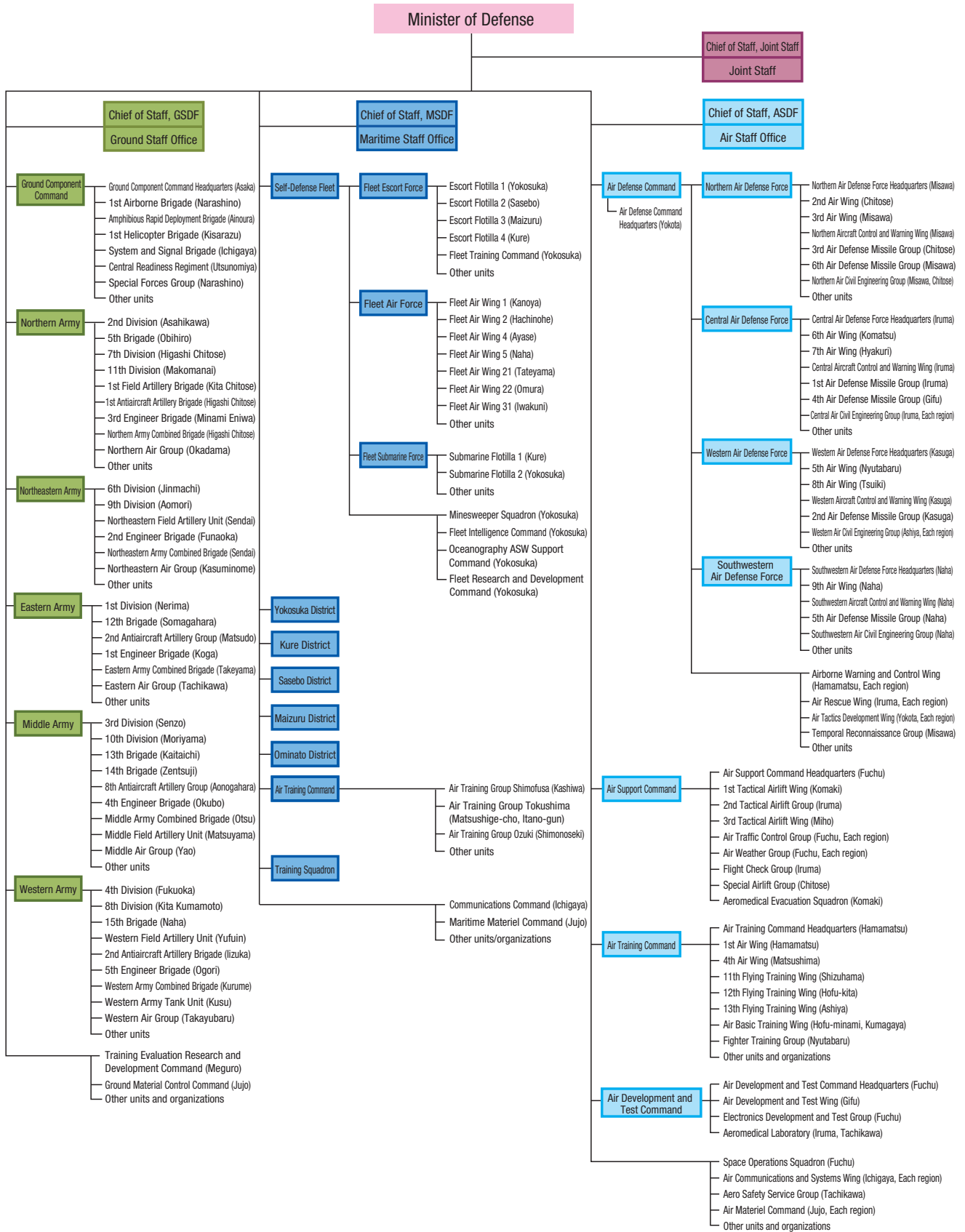
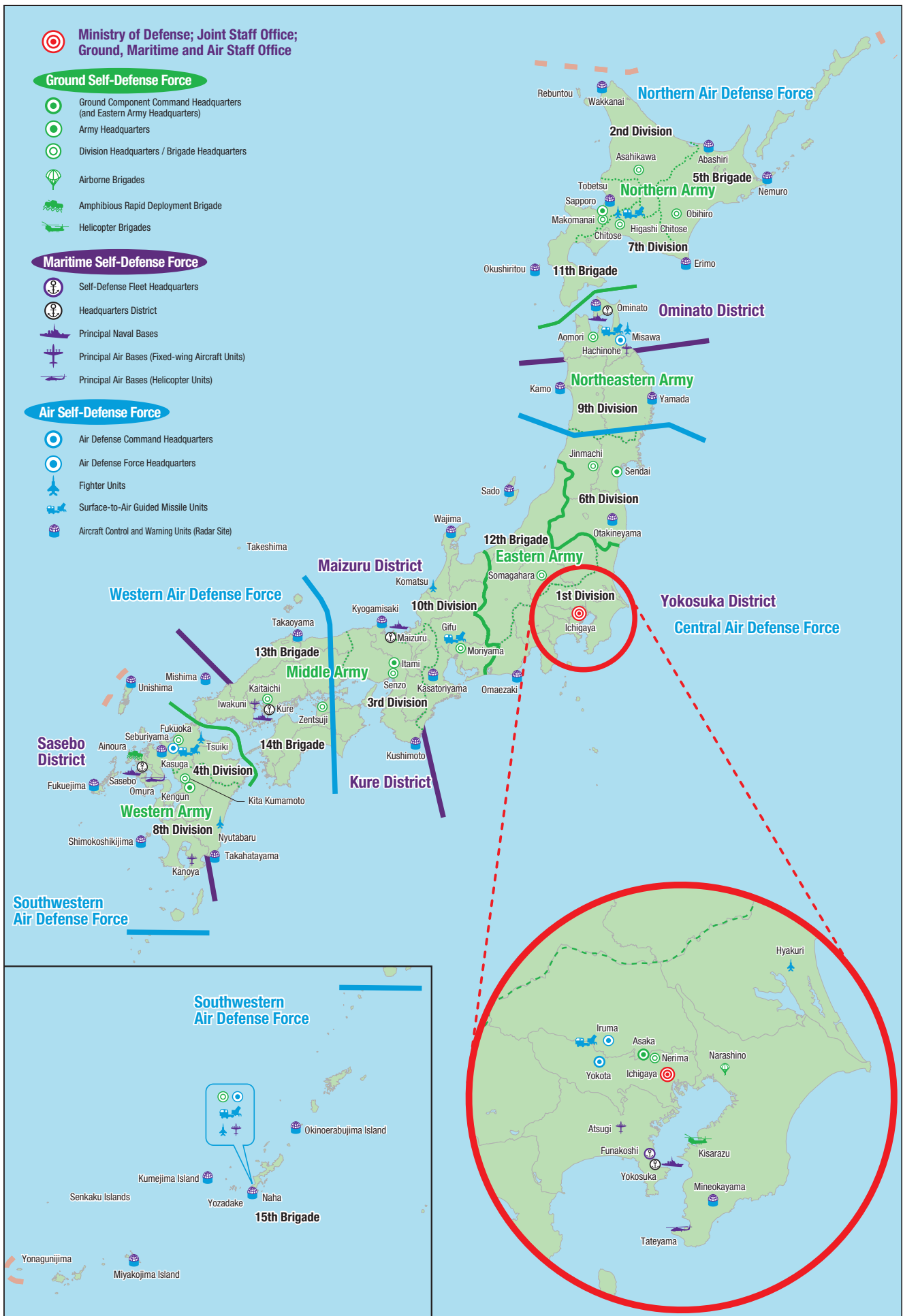


Fig. II-3-2-4 Location of Principal SDF Units (for illustrative purposes) (As of March 31, 2021)



which deliberates on basic principles concerning affairs under the Ministry's jurisdiction. Furthermore, there are the Administrative Vice-Minister of Defense, who organizes and supervises the administrative affairs of each bureau and organization to support the Minister of Defense, and the Vice-Minister of Defense for International Affairs, who is responsible for the overall coordination of duties such as those related to international affairs.

Moreover, the Internal Bureaus of the MOD, Joint Staff, Ground Staff Office, Maritime Staff Office, Air Staff Office, and the Acquisition, Technology & Logistics Agency (ATLA), as an external bureau, have been established in the MOD. The Internal Bureaus of the MOD are responsible for basic policy relating to the duties of the SDF. The Director-General of the Minister's Secretariat and the Directors-General of each Bureau within the Internal Bureaus, along with the Commissioner of ATLA who is in charge of defense equipment administration, support the Minister of Defense by providing assistance from a policy perspective.

The Joint Staff is a staff organization for the Minister of Defense concerning the operation of the SDF. The Chief of Joint Staff provides centralized support for the operations of the SDF for the Minister of Defense from a military expert's perspective. The Ground Staff, Maritime Staff and Air Staff are the staff organizations for the Minister of Defense concerning their respective services except operations of the SDF, with the Chiefs of Staff for the Ground Self-Defense Force (GSDF), the Maritime Self-

Defense Force (MSDF) and the Air Self-Defense Force (ASDF) acting as the top ranking expert advisers to the Minister of Defense regarding these services.









In this manner, the MOD has ensured that the support for the Minister from a policy perspective and the support for the Minister from a military expert's perspective are provided in a well-balanced manner like the two wheels of a cart, so to speak, in order for the Minister of Defense to appropriately make decisions. To make this concept even more explicit, Article 12 of the Ministry of Defense Establishment Act was amended to stipulate that the support for the Minister of Defense provided by the Director-General of the Minister's Secretariat and the Directors-General of each Bureau as well as the Commissioner of ATLA shall be conducted in cooperation with the support for the Minister by each Chief of Staff, when said Act was amended in 2015.²

 Chapter 1, Section 2-3-4 (Securing Civilian Control), p. 208

3 Base of Defense Administration in Regional Areas

The MOD has Regional Defense Bureaus in eight locations across the country (Sapporo City, Sendai City, Saitama City, Yokohama City, Osaka City, Hiroshima City, Fukuoka City, and Kadema Town) as its local branch in charge of comprehensive defense administration.

In addition to implementing measures to promote harmony between defense facilities and surrounding areas

		<p>Video: GSDF 70th anniversary commemorative video</p> <p>URL: https://www.youtube.com/watch?v=QKGQPy1Q8jc&feature=youtu.be</p>	
		<p>Video: MSDF official PR video –STRENGTH & READINESS–</p> <p>URL: https://www.youtube.com/watch?v=jhfv2ISaWLS&t=237s</p>	
		<p>Video: ASDF: The Seven Units Protecting the Skies of Japan</p> <p>URL: https://youtu.be/eNqAeO5Pydo</p>	
		<p>Video: ATLA official PR video</p> <p>URL: https://www.youtube.com/watch?v=08dz3zJzhv4</p>	

² The Government has made replies regarding civilian control and the role of the civilian officials in the Internal Bureaus during the Diet deliberations on the Amendment Act, stating: "Civilian control means prioritizing politics over the military in democratic countries. Civilian control in our country consists of control by the Diet, control by the Cabinet (including the National Security Council), and control within the MOD. Control within the MOD means that the Minister of Defense, a civilian, manages, operates, and controls the SDF. In addition to support from political appointees, such as the State Minister of Defense and Parliamentary Vice-Ministers of Defense, support from civilian officials in the Internal Bureaus also plays an important role in aiding the exercise of civilian control by the Minister of Defense. The role of civilian officials in the Internal Bureaus in civilian control is to support the Minister of Defense, and there is no relationship in which civilian officials of the Internal Bureaus issue commands to units."

and inspecting equipment, Regional Defense Bureaus carry out various measures to obtain the understanding and cooperation of both local public entities and local residents towards the MOD/SDF activities.

See Part IV, Chapter 5, Section 1 (Measures to Harmonize with Regional Society and the Environment), p. 480

2 Joint Operations System of the SDF

In order to rapidly and effectively fulfill the duties of the SDF, the MOD/SDF has adopted the joint operations system in which the GSDF, the MSDF, and the ASDF are operated integrally. Furthermore, in the future, it will work toward building an architecture that is capable of realizing cross-domain operations including new domains, which are space, cyberspace, and electromagnetic spectrum.

1 Outline of Joint Operations System

(1) Role of Chief of Joint Staff

- a. The Chief of Joint Staff develops a joint operations concept for SDF operations, and centrally supports the MOD on SDF operations from a military expert's perspective.
- b. The Minister's commands concerning the operations of the SDF are delivered through the Chief of Joint

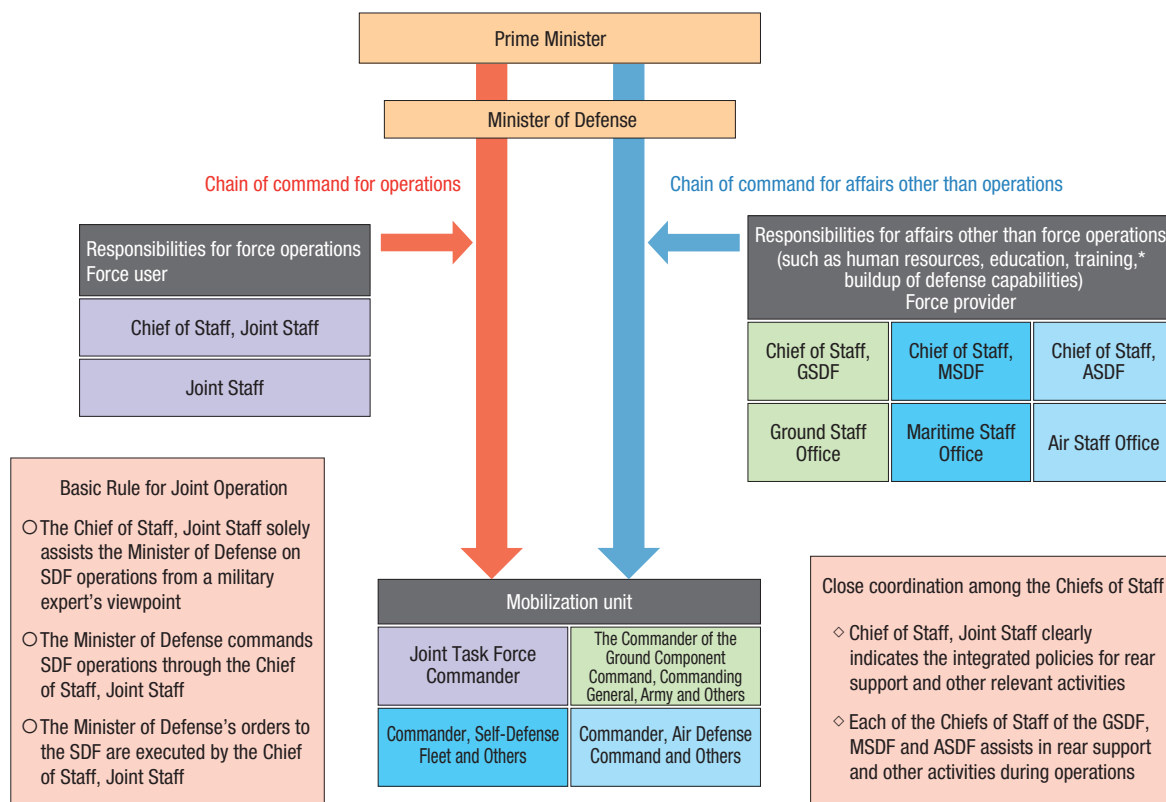
Staff, and orders concerning operations of the SDF are executed by the Chief of Joint Staff. In doing this, the Minister's commands and orders are delivered through the Chief of Joint Staff not only in cases where a joint task force³ is organized, but also in cases where a single SDF unit is employed to respond.

(2) Relationship between Chief of Joint Staff, and Other Chiefs of Staff

The Joint Staff undertakes functions relating to the operations of the SDF, while the Ground, Maritime and Air Staff Offices undertake functions for unit maintenance, such as personnel affairs, building-up defense capability, and education and training.

See Fig. II-3-2-5 (Operational System of the SDF and Roles of the Chief of Joint Staff and the Chiefs of Staff of the Ground, Maritime, and Air Self-Defense Forces)

Fig. II-3-2-5 Operational System of the SDF and Roles of the Chief of Joint Staff and the Chiefs of Staff of the Ground, Maritime, and Air Self-Defense Forces



*The Chief of Staff, Joint Staff is responsible for joint training

³ This applies to the case in which a special unit is organized to carry out a specific duty, or the required troops are placed partly under the authority of a commander outside of their usual command structure based on the stipulations of Article 22, paragraphs 1 or 2 of the SDF Law, and refers to units made up of more than two units of the GSD, the MSDF, or the ASDF.

2 Strengthening Joint Operational Functions

(1) Past Initiatives

In order to ensure the accuracy of decision-making relating to the operations of the SDF and to make the process swifter, in October 2015, the Bureau of Operational Policy was abolished and some of its functions, such as the planning and drafting of laws and regulations relating to unit operations, were transferred to the Bureau of Defense Policy in order to unite affairs concerning actual operations of the units into the Joint Staff. This change has made the Joint Staff assume work that the Internal Bureaus had previously conducted, such as external explanations, including replies at the Diet, and communication and coordination with related ministries and governmental agencies. Regarding this

work, therefore, the Administrative Vice Chief of Joint Staff, a Vice-Chief of Joint Staff level post for civilian officials, and the Joint Staff Councilor, a post for civilian officials at the level of a division director and department director general have been established to conduct external coordination duties, etc., taking advantage of the expertise of civilian officials concerning actual operations of the units.

(2) Future Initiatives

In order to realize cross-domain operations, the Joint Staff's posture designed for efficient SDF operations and for new domains will be strengthened, thereby enabling swift and effective exercise of the SDF's total capabilities. In addition, the future framework for joint operations will be examined.

In FY2021, the Ministry of Defense (MOD)/Self-Defense Forces (SDF) will steadily implement initiatives toward building a Multi-domain Defense Force based on the National Defense Program Guidelines for FY2019 and beyond (NDPG) and the Mid-Term Defense Program (FY2019-FY2023; MTDP).


In particular, in order to realize cross-domain operations, the MOD/SDF will acquire and strengthen more capabilities in new domains, which are space, cyberspace and electromagnetic spectrum. In addition, the MOD/SDF will continue to enhance capabilities in maritime and air domains, stand-off defense capability, comprehensive air and missile defense capability, and maneuver and deployment capability, in order to effectively deal with various situations by employing them in combination with the capabilities in the new domains. Moreover, the MOD/SDF is enhancing the sustainability and resiliency of defense capability including logistics support.

In addition, Japan gives priority to reinforcing the

human resource base in light of the aging population with a declining birth rate and reinforcing the technology base due to advances in military technologies. The MOD/SDF will strengthen the Japan-U.S. Alliance as well as security cooperation with other countries in view of changes in the security environment.

At the same time, in this process, the MOD/SDF will strengthen its defense capability at speeds that are fundamentally different from the past and by allocating resources flexibly and intensively. Furthermore, the MOD/SDF will further promote jointness of the Ground, Maritime and Air Self-Defense Forces in all areas and, avoiding a stove-piped approach, optimize their organizations and equipment.

In addition, considering the increasingly severe fiscal conditions and other factors, Japan will strictly work to achieve greater efficiency and streamlining.

 **See** Fig. II-4-1-1 (Main Projects of Build-up of Defense Capabilities in FY2021 [Priorities in Strengthening Capabilities Necessary for Cross-domain Operations])



Type-20 5.56-mm rifle



Partial renovation of MSDF Destroyer JS "Izumo" to enable landing and take-off of F-35B fighters



F-35B fighter aircraft



Video: F-35B fighter taking off from a vessel (courtesy of the F-35 Lightning II Joint Program Office)
URL: https://youtu.be/PwGikv_8BhY



Video: F-35B fighter landing on a vessel (courtesy of the F-35 Lightning II Joint Program Office)
URL: <https://www.youtube.com/watch?v=iqupeS4VXoA>



Fig. II-4-1-1

Main Projects of Build-up of Defense Capabilities in FY2021
(Priorities in Strengthening Capabilities Necessary for Cross-domain Operations)

Capabilities that should be acquired and strengthened	Outline
Capabilities in Space Domain	<ul style="list-style-type: none"> ○ Procurement of SSA satellite (space-based optical telescope) ○ Development of SSA systems ○ Strengthening information-gathering capability using outer space ○ Establishment of Space Operations Group (tentative name), etc.
Capabilities in Cyber Domain	<ul style="list-style-type: none"> ○ Enhancement of Cyber Defense Group, etc. <ul style="list-style-type: none"> • Establishment of the JSDF Cyber Defense Command (tentative name) as a joint unit ○ Securing and developing of cyber workforce ○ Utilization of cutting-edge cyber technologies in the field of cyberspace ○ Improving security of system networks, etc.
Capabilities in the Electromagnetic Domain	<ul style="list-style-type: none"> ○ Reinforcement of the capabilities for neutralizing the radar of an opponent invading Japan <ul style="list-style-type: none"> • Development of stand-off electronic warfare aircraft ○ Strengthening of capability to minimize electromagnetic jamming from an opponent attempting to invade Japan <ul style="list-style-type: none"> • Procurement of F-35A (×4) and F-35B (×2) fighters with superior electronic protection capability ○ Enhancement of systems of electronic warfare units <ul style="list-style-type: none"> • Establishment of the GSDF Electronic Operations Unit (tentative name) ○ Strengthening intelligence capability related to the electromagnetic spectrum, etc.
Capabilities in Maritime and Air Domains	<ul style="list-style-type: none"> ○ Procurement of P-1 patrol aircraft (×3) ○ Refurbishment of SH-60K patrol helicopter to rescue specification ○ Procurement of US-2 search and rescue amphibian (×1) ○ Construction of destroyers (×2) and a submarine ○ Refurbishment of Izumo-class destroyers ○ Japan-led development of F-X, etc.
Stand-off defense capability	<ul style="list-style-type: none"> ○ Procurement of stand-off missiles, etc.
Comprehensive air and missile defense capability	<ul style="list-style-type: none"> ○ Procurement of PAC-3MSEs ○ Research on HGV intercept system ○ Technical assistance service related to the study of the Aegis system-equipped vessel, etc.
Maneuver and deployment capability	<ul style="list-style-type: none"> ○ Procurement of Type-16 mobile combat vehicles (×22) ○ Reorganization of the 2nd Division into a Rapid Deployment Division ○ Maneuver, deployment and field training in remote islands by rapid deployment division and brigade ○ Procurement of C-2 transport aircraft (×1), etc.
Sustainability and resilience	<ul style="list-style-type: none"> ○ Procurement of various ammunition necessary for continuous unit operation ○ Promotion of measures against aging and earthquake proofing of SDF facilities ○ Ensuring necessary expenses for sustainment and maintenance of equipment, etc.

Section 2 Defense-Related Expenditures

1 Overview of Defense-Related Expenditures

Defense-related expenditures include expenses for improving defense capabilities and maintaining and managing the SDF, as well as expenses necessary for the implementation of measures against neighborhood affairs in the vicinity of defense facilities.

In comparison with the previous fiscal year, defense-related expenditures for FY2021¹ were increased by 54.7 billion yen to 5.1235 trillion yen, rising for the ninth consecutive year. When including expenses related to the Special Action Committee on Okinawa (SACO) and the U.S. Forces realignment-related expenses (the portion allocated for mitigating the impact on local communities), and expenses for the three-year emergency response plan for disaster prevention, disaster mitigation, and national resilience building, among other expenses, defense-related expenditures were increased by 28.9 billion yen

from the previous fiscal year to 5.3422 trillion yen.

Additionally, the first supplementary budget for FY2020 was 12.1 billion yen and contained expenses for medical instruments to accept infected people in SDF hospitals. The second supplementary budget for the year was 6.3 billion yen for response to the spread of the novel coronavirus disease (COVID-19) infections. The third supplementary budget for the year was 386.7 billion yen including expenses for strengthening the capability to respond to various disasters, reinforcement of the SDF’s infrastructure base, and ensuring stable operations, among other expenses.

See Fig. II-4-2-1 (Comparison between Defense-Related Expenditures [Initial Budget] of FY2020 and FY2021)
 Fig. II-4-2-2 (Trend in Defense-Related Expenditures [Initial Budget] Over the Past 15 Years)

2 Breakdown of Defense-Related Expenditures

Defense-related expenditures are broadly classified into “personnel and food provision expenses,” which covers items such as wages and meals for SDF personnel, and “material expenses,” which finance the repair and maintenance of equipment, the purchase of fuel, the education and training of SDF personnel and the

procurement of equipment and others. Material expenses are further classified into “obligatory outlay expenses,”² which are paid based on contracts concluded in previous fiscal years, and “general material expenses,” which are paid under current-year contracts. Material expenses are also referred to as “program expenses,” and since general

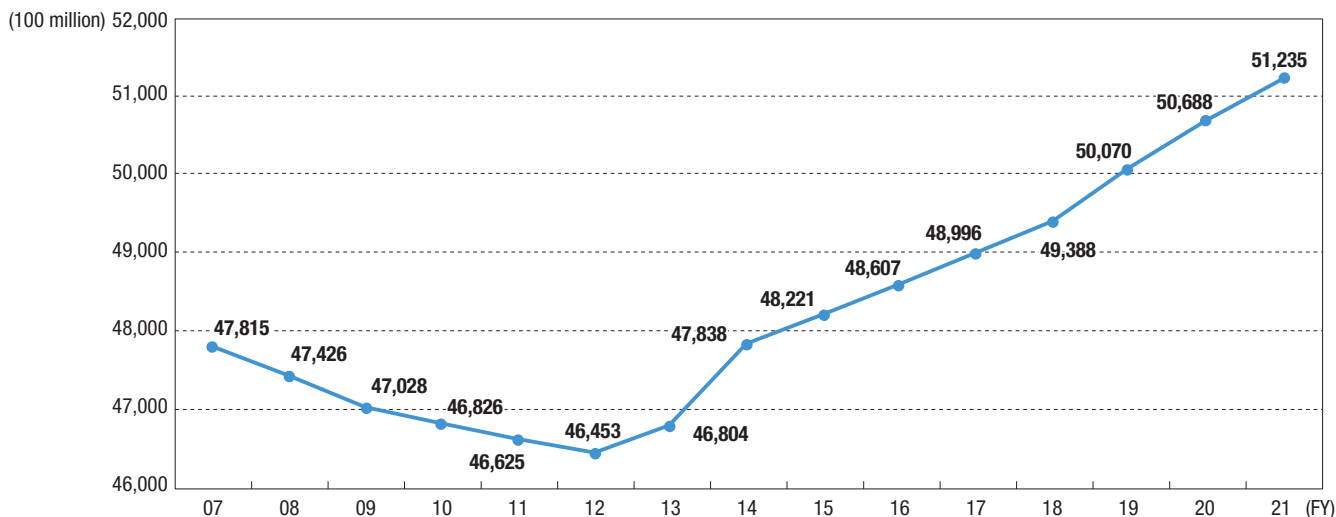
Fig. II-4-2-1 Comparison between Defense-Related Expenditures (Initial Budget) of FY2020 and FY2021

Category	FY2020	FY2021		
			Fiscal YOY growth	
Annual expenditure (note)	50,688	51,235	547	1.1%
Personnel and food provisions	21,426	21,919	493	2.3%
Material expenses	29,262	29,316	54	0.2%
Future obligation (note)	52,106	52,784	678	1.3%
New contracts	24,050	24,090	40	0.2%
Existing contracts	28,056	28,694	638	2.3%

Notes: 1. Does not include SACO-related expenses, the U.S. Forces realignment-related expenses (the portion allocated for mitigating the impact on local communities), and expenses for the three-year emergency response plan for disaster prevention, disaster mitigation, and building national resilience, etc. If these are included, the figures are 5,313.3 billion yen for FY2020 and 5,342.2 billion yen for FY2021; and for future obligation, 5,431.0 billion yen for FY2020 and 5,533.0 billion yen for FY2021.
 2. The budget amount for FY2021 includes expenses related to the Cabinet Secretariat and the Digital Agency (tentative name).
 3. Figures may not add up to the total due to rounding.

¹ Defense-related expenditures for FY2020 include expenditures to be transferred to the Cabinet Secretariat and the Digital Agency (tentative name).
² Some projects for build-up of defense capabilities extend over multiple years. In these cases, the fiscal year in which the contract is concluded is different from the fiscal year in which the payment to the contractor is made. Therefore, the future maximum obligation is allocated to the budget as a contract resulting in a Treasury obligation (type of budget that only grants an authority to incur obligations; the contracts can be concluded, but the payment cannot be made). Based on such budgeting, in the fiscal year in which the construction is completed or the equipment is procured, expenses necessary for payment are allocated as budget expenditure, in principle (type of budget that grants authorities to incur obligations and make payment; the contracts can be concluded and the payment can be made). Budget expenditure for payments incurred under contracts concluded in previous fiscal years is called “obligatory outlay expenses,” while expenditure for future fiscal years is termed “future obligation.”
 For cases where a continued project over multiple years is necessary, there is also a system of continuing expenditure as a means to grant the authority to incur obligations and make payment over multiple years by obtaining a resolution of the Diet integrally for the total cost and the amounts of yearly installments for the project in advance.

Fig. II-4-2-2 Trend in Defense-Related Expenditures (Initial Budget) Over the Past 15 Years




- Notes: 1. The figures above do not include SACO-related expenses, the U.S. Forces realignment-related expenses (the portion allocated for mitigating the impact on local communities), expenses for the introduction of new government aircraft, and expenses for the three-year emergency measures for disaster prevention/reduction and national resilience. Including these expenses, total defense-related expenditures were as follows: 4,801.3 billion yen in FY2007, 4,779.6 billion yen in FY2008, 4,774.1 billion yen in FY2009, 4,790.3 billion yen in FY2010, 4,775.2 billion yen in FY2011, 4,713.8 billion yen in FY2012, 4,753.8 billion yen in FY2013, 4,884.8 billion yen in FY2014, 4,980.1 billion yen in FY2015, 5,054.1 billion yen in FY2016, 5,125.1 billion yen in FY2017, 5,191.1 billion yen in FY2018, 5,257.4 billion yen in FY 2019, 5,313.3 billion yen in FY2020, and 5,342.2 billion yen in FY2021.
2. The budget for FY2021 includes expenses (18.7 billion yen) to be transferred to the Cabinet Secretariat and the Digital Agency (tentative name).

Chapter
4


Build-up of Defense Capability, etc.

material expenses include repair costs for equipment, education and training expenses for personnel, and the purchase of fuel, they are referred to also as “activity expenses.” The MOD terms this classification method as “classification by expenses.”

Personnel and food provision expenses as well as obligatory outlay expenses, both of which are mandatory expenses, account for 80% of the total defense-related budget. The remaining 20% of the budget includes spending for repairing equipment and for implementing measures to alleviate the impact on local communities hosting U.S. bases in Japan. As such, a high percentage of the budget is allocated for maintenance purposes. For this reason, the breakdown of the defense-related expenditures cannot be easily altered in a significant manner on a single-year basis.

 See Fig. II-4-2-3 (Relationship between Annual Expenditure and Future Obligation Concerning New Contracts)

Personnel and food provision expenses were increased by 49.3 billion yen from the previous fiscal year and obligatory outlay expenses for the year increased by 4.1 billion yen. Also general material expenses increased by 1.4 billion yen from the previous fiscal year.³

 See Fig. II-4-2-4 (Breakdown of Defense-Related Expenditures [Initial Budget] [FY2021])
Reference 8 (Changes in Composition of Defense-Related Expenditures [Initial Budget])

In addition to the annual budget expenditure, the amount of future obligations concerning new contracts also indicates payments for the following year and beyond (the amount of future obligation arising in the applicable fiscal year). In the build-up of defense capabilities, it is common to take multiple years from contract to delivery or completion, in areas such as the procurement of vessels, aircraft, and other primary equipment, as well as the construction of buildings such as aircraft hangars and barracks. Consequently, for such items, a procedure is undertaken whereby a multi-year contract is arranged, and it is promised in advance at the time of the contract that payments will be made in the following fiscal year and beyond (within five years, in principle). The sum of money to be paid in the following fiscal year and beyond, based on such a multi-year contract, is called the amount of future obligation. The amount of future obligation concerning new contracts arising in FY2021 increased from the previous fiscal year by 4.0 billion yen (0.2%).

Furthermore, if looked at on a contract basis,⁴ which shows the scale of operations, there is an increase from the previous fiscal year of 5.4 billion yen (0.2%).

 See Part IV, Chapter 2, Section 3-1 (Project Management throughout Equipment Life Cycle), p. 447

³ The comparison with the previous year concerns expenditure excluding SACO-related expenses, the U.S. Forces realignment-related expenses (the portion allocated for mitigating the impact on local communities), and expenses for the three-year emergency response plan for disaster prevention, disaster mitigation, and building national resilience, among others. The same applies hereinafter in regard to this section (Breakdown of Defense-Related Expenditures).

⁴ The sum total of general material expenses and future obligation concerning new contracts, which shows the amount of the material expenses (program expenses) that are to be contracted in the applicable fiscal year and to be paid in the same fiscal year and beyond. The amount is 3.4029 trillion yen in FY2021.

Fig. II-4-2-3 Relationship between Annual Expenditure and Future Obligation Concerning New Contracts

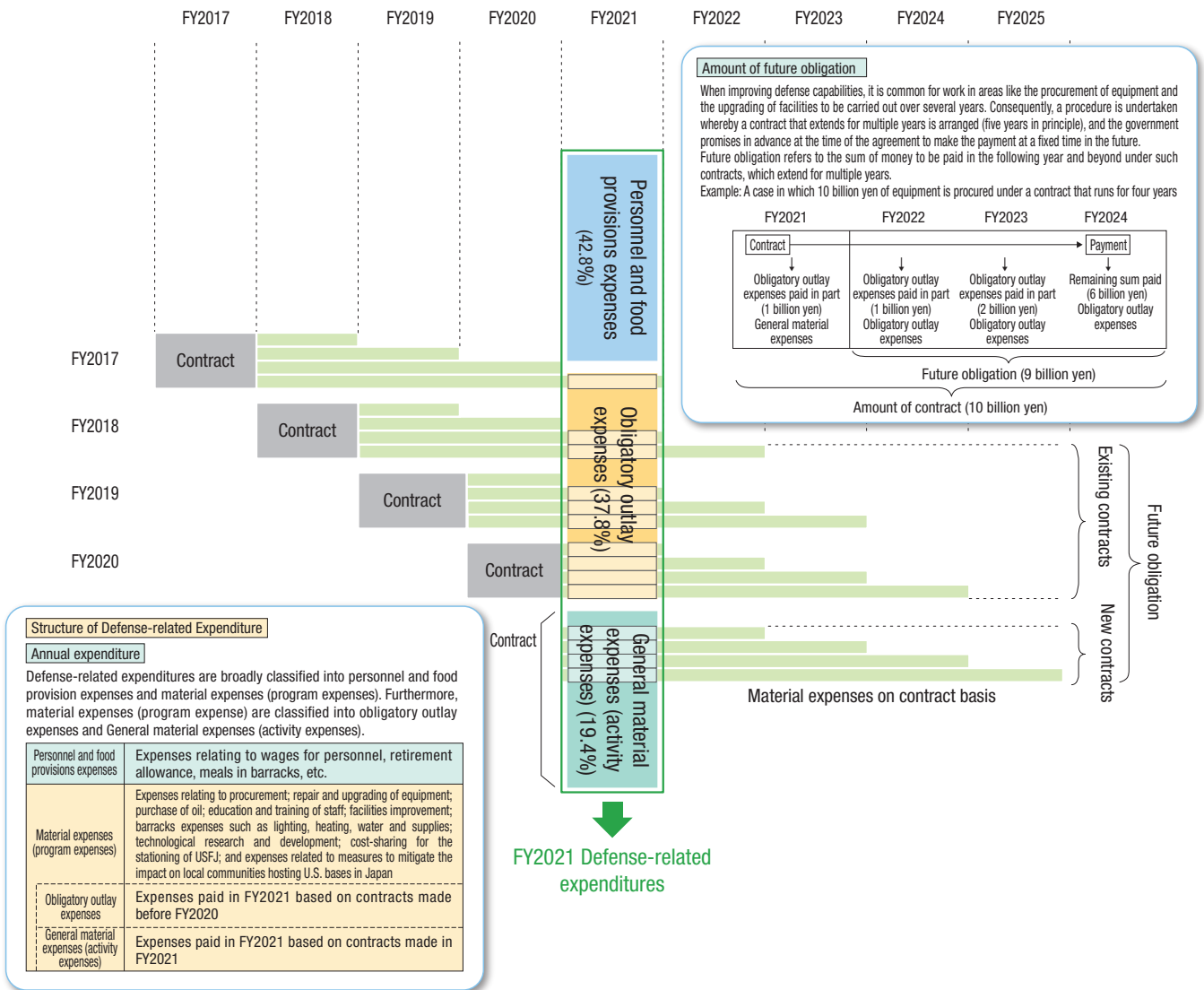
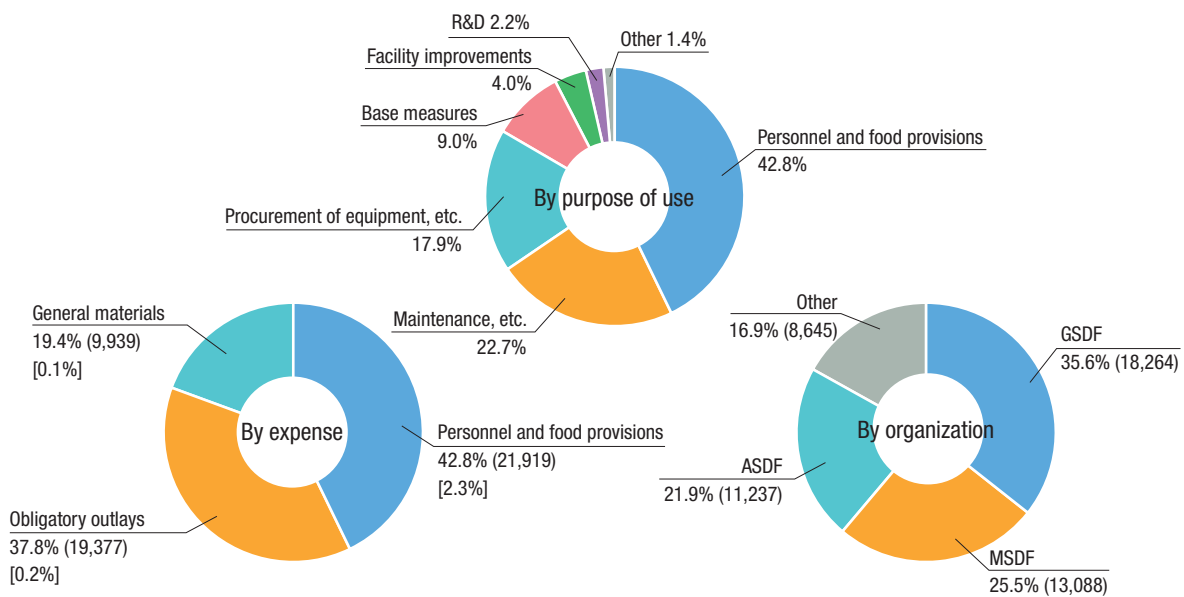


Fig. II-4-2-4 Breakdown of Defense-Related Expenditures (Initial Budget) (FY2021)



- Notes:
- Figures in parenthesis () indicate the budget amount; unit: 100 million yen.
 - The above figure does not include SACO-related expenses (14.4 billion yen), the U.S. Forces realignment-related expenses (the portion allocated for mitigating the impact on local communities) (204.4 billion yen), and expense for the introduction of new government aircraft (0.03 billion yen).
 - Includes expenses (18.7 billion yen) to be transferred to the Cabinet Secretariat and the Digital Agency (tentative name).
 - Figures in square brackets [] indicate year-on-year growth rate (%).

3 Initiatives for Increasing the Efficiency of Procurement

In order to achieve further streamlining and rationalization, the MTDP sets forth that the MOD will work to secure substantial financial resources through suspension of the use of equipment whose importance has decreased, review of projects of low cost-effectiveness, and optimization of equipment procurement such as thoroughgoing cost management and control and efficient procurement including long-term contracts.

In the FY2021 budget, the MOD aims to realize a cost reduction of approximately 416.8 billion yen by implementing these streamlining measures. Concrete initiatives introduced in the FY2021 budget are as follows.

- Reduction of approximately 206.8 billion yen through project review, including suspension of the use of equipment of lowered priority

- Reduction of approximately 28.8 billion yen through communalization and optimization of specifications, including use of convertible modules and civilian goods
- Reduction of approximately 38.1 billion yen through efficiency improvement by bulk procurement and joint procurement
- Reduction of approximately 10.4 billion yen through making use of long-term contracts that run over five years
- Reduction of approximately 132.7 billion yen through scrutiny of prices and related costs of equipment

The MOD will also auction off decommissioned goods and open the remains of the Imperial Headquarters bunker to the public with an admission fee as means of securing revenues.

Column

Dutch Auctions of Unused Goods

Substantial financial resources are required to strengthen Japan's defense capabilities in light of the current severe financial situation. The Medium Term Defense Program also calls for securing more income.

As part of this effort, In July 2020, the Ministry of Defense conducted the first Dutch auction of unused Self-Defense Force items. These items were previously crushed and sold as scrap iron or scrap metal, or disposed of as waste, but it was expected higher prices could be demanded from selling them to enthusiasts. Dutch auctions are a type of sale and purchase

procedure stipulated in the Public Accounting Act, etc., in which participants repeatedly compete by making mutually visible bids for the prices at which they are willing to buy.

This time, 29 items, including water bottles and other personal equipment from the GSDF, the ship's wheel from the decommissioned training ship Yamayuki, and helmets from Air Self-Defense Force pilots, were sold in 21 separate auction sales, for a total sale price of 5,818,000 yen (excluding tax). The auction included measures to prevent the spread of COVID-19.



Auction poster



The auction was conducted under the direction of Minister Kono.

4 Comparison with Other Countries

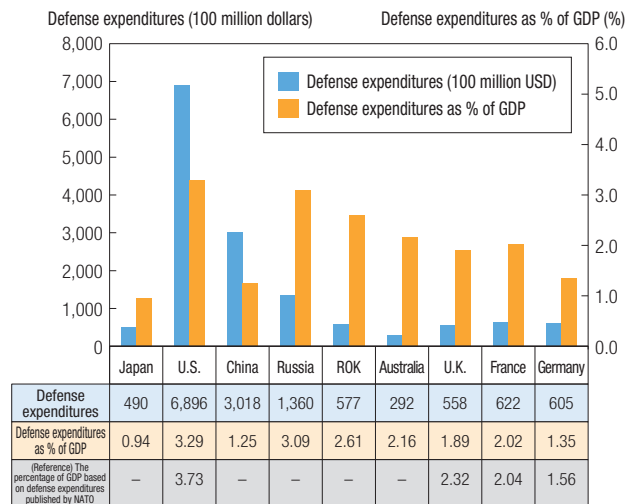
It is not possible to accurately compare the amounts of defense expenditures of countries due to a number of factors: there is no internationally unified definition of defense expenditures in the first place; even if defense expenditures were publicly disclosed, their overall amount or their breakdown is sometimes unclear; and the budget system varies by country.

On such basis, if Japan's defense-related expenditures and those of other countries officially published by each government were converted into dollar amounts, using the purchasing power parity⁵ of each country reported by the Organisation for Economic Co-operation and Development (OECD), the results would be as shown in Fig. II-4-2-5 (The Defense Expenditures of Major Countries [FY2020]). Compared to the other G7 countries, as well as Australia and the Republic of Korea, Japan's defense-related expenditures as a percentage of GDP rank the lowest.

See Reference 9 (Trend of Defense Expenditures of Major Countries)

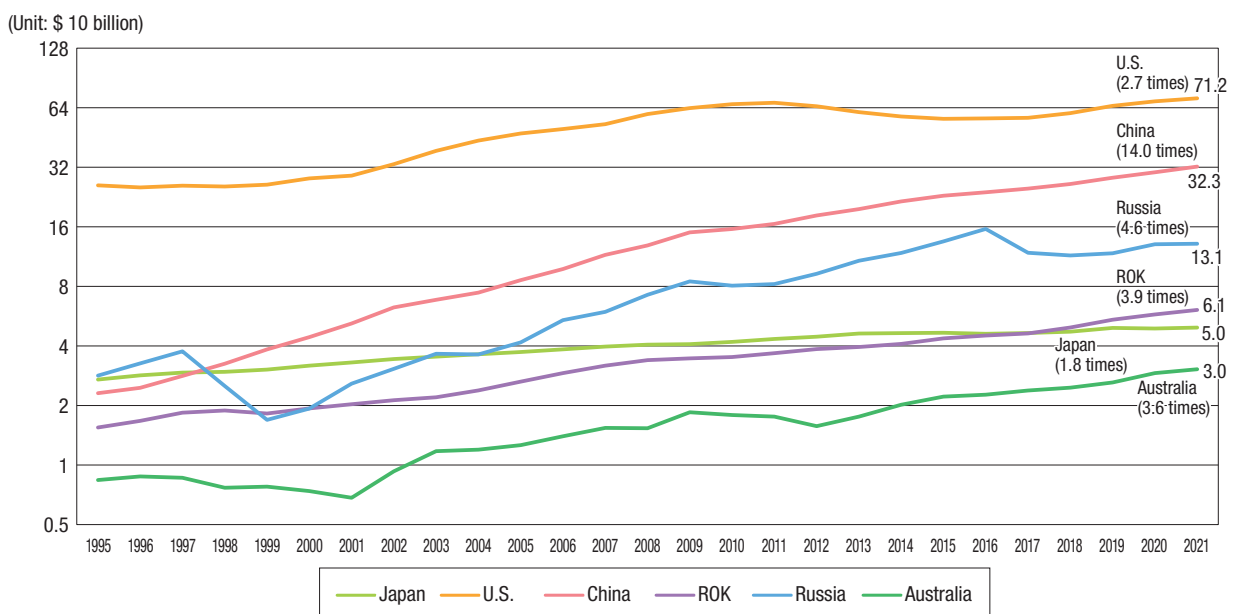
In addition, Fig. II-4-2-6 (Changes in Defense Expenditures in Six Major Countries [logarithmic graph]) shows the trends in defense expenditures of major countries since 1995.

Fig. II-4-2-5 The Defense Expenditures of Major Countries (FY2020)



Notes: 1. Defense expenditures are based on those officially published by each country and are in US dollars while referring to each country's purchasing power parity for FY2020 as published by the OECD (officially published rate as of April 2021) (1 dollar = 103.412076 yen = 4.200808 yuan = 0.740525 rubles = 869.063949 won = 1.461587 Australian dollars = 0.716264 pound = 0.740525 France euros = 0.744679 Germany euros)
 2. The percentage of GDP is calculated based on defense expenditures officially published by each country (in local currency) while referring to the GDP of each country published by the IMF (in local currency).
 3. As defense expenditures published by NATO (which include pensions for retired veterans, etc.) may differ from those officially published by each country, the percentage of GDP based on defense expenditures published by NATO (in March 2021) does not necessarily coincide with the percentage of GDP calculated based on defense expenditures officially published by each country.

Fig. II-4-2-6 Changes in Defense Expenditures in Six Major Countries (logarithmic graph)



(Notes)

- Regarding the defense expenditures of the six countries, figures officially published by the government of each country were converted into US dollars amounts, using the purchasing power parity for 2020 (published by the OECD: as of April 2021). The figures for 2021 were converted into US dollars using the purchasing power parity of 2020. (1 dollar = 103.412076 yen = 4.200808 yuan = 0.740525 rubles = 869.063949 won = 1.461587 Australian dollars = 0.716264 pound = 0.740525 France euros = 0.744679 Germany euros)
- Japan's defense-related expenditure shows its initial budget (excluding SACO-related expenses, the U.S. Forces realignment-related expenses (the portion allocated for mitigating the impact on local communities), and expenses for the three-year emergency response plan for disaster prevention, disaster mitigation, and building national resilience, etc.).
- Regarding the United States, the figures for FY2021 are an estimates.
- The amount and year-on-year growth rate (figures rounded to one decimal place) for FY1995-FY2021 are indicated.

⁵ A gauge that measures each country's ability to purchase goods and services by taking into account their respective price levels. Although there also exists a method of converting their defense expenditures into dollar amounts at respective currency rates, their dollar-based defense expenses calculated in this way do not necessarily reflect the precise value based on each country's price levels.

This chapter gives an outline of a full picture of the framework for the Government's responses to various contingencies as well as the main operations of the SDF.



Reference 10 (Conditions Required for Main Operations of the Self-Defense Forces [Including Diet Approval] and Authority for the Use of Weapons Concerning Main Operations of the Self-Defense Forces)

1 Responses to Armed Attack Situations, etc., and Survival-Threatening Situations

The Act on the Peace and Independence of Japan and Maintenance of the Nation and the People's Security in Armed Attack Situations, etc., and a Survival-Threatening Situation¹ is aimed at establishing a system to respond to an Armed Attack Situation and Anticipated Armed Attack Situation (Armed Attack Situations, etc.²) and Survival-Threatening Situations,³ thereby contributing to the peace and independence of Japan as well as the safety of the country and the people. The Act specifies items that should be stipulated as basic principles and basic policies (the Basic Response Plan), as well as the responsibilities of national and local governments, for responding to Armed Attack Situations, etc., and Survival-Threatening Situations.

(2) When the situation is confirmed as an Armed Attack Situation, etc., or a Survival-Threatening Situation, the reason why there are no other appropriate means available to ensure Japan's survival and protect its people, and the use of force is necessary to respond to the situation

b. An Overall Plan Related to the Response

c. Important Matters Related to the Response Measures



Fig. II-5-1-1 (Procedures for Responding to Armed Attack Situations, etc., and Survival-Threatening Situation)

1 Armed Attack Situations, etc. and Survival-Threatening Situations

Based on the Law for Peace and Independence of Japan and Maintenance of the Nation and the People's Security in Armed Attack Situations etc. (Armed Attack Situation Response Law), in situations such as an Armed Attack Situation, etc. or a Survival-Threatening Situation, the Government is required to adopt the Basic Response Plan, which includes the following items, and ask for approval by the Diet.

a. The Following Items concerning Situations that Need to Be Dealt with:

(1) Sequence of events of the situation, the confirmation of occurrence of an Armed Attack Situation, etc., or a Survival-Threatening Situation, and the facts that support this confirmation

2 Emergency Situations other than Armed Attack Situations, etc., and Survival-Threatening Situations

Based on the Armed Attack Situation Response Law, the Government is to also implement appropriate and rapid response measures in emergency situations other than an Armed Attack Situation, etc. and Survival-Threatening Situations⁴ in order to ensure the peace and independence of the country, and to maintain the security of the country and its people.

3 Responses of the SDF

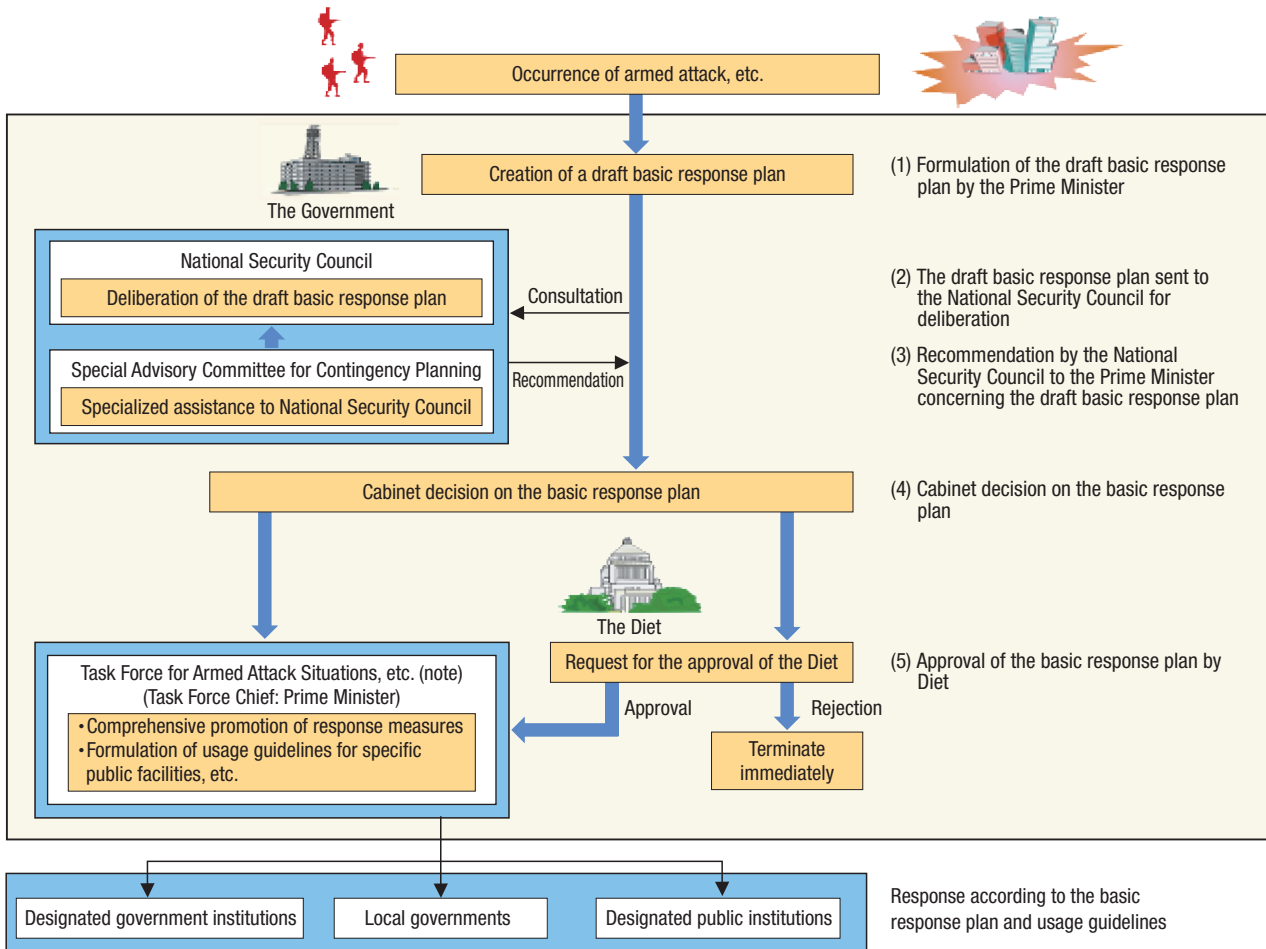
The Prime Minister can issue a Defense Operation order to the whole or part of the SDF when it is deemed necessary for the defense of Japan in Armed Attack Situations and Survival-Threatening Situations. Prior Diet approval is required for a Defense Operation order in principle. The SDF under Defense Operation duty is allowed to exercise

¹ Official title: Act on the Peace and Independence of Japan and Maintenance of the Nation and the People's Security in Armed Attack Situations, etc., and a Survival-Threatening Situation

² "Armed Attack Situations" refers to situations in which an armed attack against Japan from outside occurs or in which it is considered that there is an imminent and clear danger of an armed attack. "Expected Armed Attack Situations" refers to situations in which an armed attack is not yet made but the tension increased and an armed attack is expected. Both situations are collectively called "Armed Attack Situations, etc."

³ A "Survival-Threatening Situation" means a situation where an armed attack against a foreign country that is in a close relationship with Japan occurs, which in turn poses a clear risk of threatening Japan's survival and of overturning people's rights to life, liberty and pursuit of happiness fundamentally

⁴ A contingency situation, other than an Armed Attack Situation and Survival-Threatening Situation, and a situation that may have a significant impact on the security of the nation and the people, including an emergency response situation (a situation where actions that may kill or injure many people by using methods equivalent to those used in an armed attack, or a situation where it is recognized that the relevant actions represent a clear and present threat that necessitate an emergency response by the state).



Note: The Task Force will be established in the Cabinet for the comprehensive promotion of measures to respond to armed attack situations or a situation where an armed attack against a foreign country results in threatening Japan's survival

the use of force only when the “three conditions for ‘the use of force’” are satisfied.

4 Civil Protection

The Civil Protection Act⁵ specifies responsibilities of the national and local governments as well as measures for evacuation, relief, and response to the armed attack induced disasters in order to protect the lives, bodies and property of the people and to minimize the impact on the livelihood of the people in an Armed Attack Situation, etc.

and emergency response. If the Minister of Defense finds it unavoidable after receiving a request from prefectural governors, or receives a request from the Task Force Chief,⁶ upon approval by the Prime Minister, the Minister of Defense can order SDF units, etc. to conduct civil protection measures or emergency response protection measures (including assisting with the evacuation of residents and immediate restoration).

See Fig. II-5-1-2 (Mechanism of Civil Protection Dispatches) Part III, Chapter 1, Section 2-5 (Initiatives Related to the Protection of Civilians), p. 276

5 Official title: Act Concerning the Measures for Protection of the People in Armed Attack Situations, etc.

6 The Prime Minister assumes the position of the Director of the Crisis Management Headquarters, but these positions are regulated as separate entities.

2 Responses to Situations that Will Have an Important Influence

The Law Concerning Measures to Ensure the Peace and Security of Japan in Situations that Will Have an Important Influence on Japan's Peace and Security⁷ aims to strengthen cooperation with foreign countries to respond to the situations that will have an important influence on Japan's peace and security (Situations that Will Have an Important Influence⁸) by carrying out measures such as logistics support activities and thereby contributing to the peace and security of Japan. The Law provides the coverage and response measures as follows:

1 Coverage

The armed forces, etc., responding to situations that will have an important influence on Japan's peace and security, which the SDF may support, are "U.S. Armed Forces engaged in activities contributing to the achievement of the objectives of the Japan-U.S. Security Treaty," "armed forces of other foreign countries engaged in activities

contributing to the achievement of the objectives of the UN Charter" and "other similar organizations."

2 Response Measures to Situations that Will Have an Important Influence on Japan's Peace and Security

Measures to respond to situations that will have an important influence on Japan's peace and security are: (1) logistics support activities, (2) search and rescue activities, (3) ship inspection operations,⁹ and (4) other measures necessary to respond to situations that will have an important influence on Japan's peace and security.

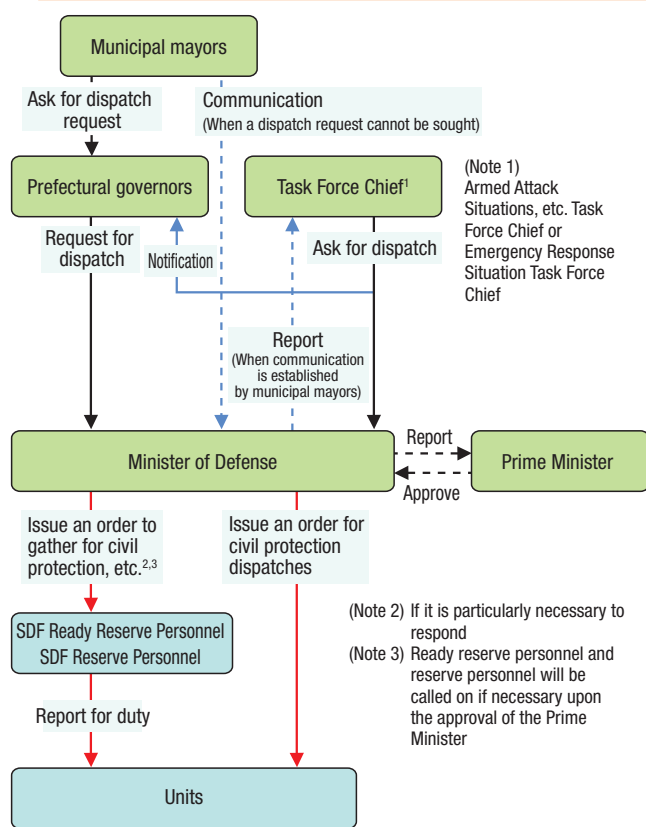
It is possible to implement response measures in foreign territories, but only when the foreign country concerned consents.

3 Measures to Avoid Integration with the Use of Force

The law sets forth the following measures in order to avoid integration with the use of force by a foreign country and also to ensure the safety of the SDF personnel:

- The SDF does not conduct activities in "the scene where a combat is actually taking place." Regarding search and rescue operations, however, when stranded personnel have been located and rescue operations have commenced, the SDF units are allowed to continue search and rescue activities as long as the safety of these units is ensured.
- The commanding officers, etc., of the SDF units order the temporary suspension of activities, etc., if combat operations occur or are expected to occur at the site of their activities or in the vicinity.
- The Minister of Defense designates the area for implementing activities, and if it is deemed difficult to implement operations smoothly and safely in the whole or part of that area, the Minister must promptly change the designation of the area or order the cessation of the activities being implemented there.

Fig. II-5-1-2 Mechanism of Civil Protection Dispatches



⁷ Official title: Law Concerning Measures to Ensure the Peace and Security of Japan in Situations that Will Have an Important Influence on Japan's Peace and Security.

⁸ "Situations that will have an important influence" refers to situations that will have an important influence on Japan's peace and security, including situations that, if left without response, could lead to a direct armed attack on Japan

⁹ Operations to inspect and confirm the cargo and destination of ships (excluding warships and others) and to request, if necessary, a change of sea route, or destination port or place, for the purpose of strictly enforcing the regulatory measures concerning trade or other economic activities to which Japan is a party, conducted based on the UN Security Council resolutions or with the consent of the flag state (the state that has the right to fly its flag as prescribed in Article 91 of the UN Convention on the Law of the Sea).


1 Public Security Operations

(1) Public Security Operations by Order

In the event of an indirect aggression or another emergency situation, the Prime Minister can order the whole or part of the SDF to deploy if it is deemed impossible to maintain public security with the general police force. In this instance, in principle, the Prime Minister must bring the order to the Diet for deliberation, and request for its approval within twenty days from the day the order has been given.

(2) Public Security Operations by Request

Upon consulting with the Public Safety Commission of the prefecture concerned, the governor of that prefecture can request the Prime Minister to dispatch units, etc., of the SDF if it is deemed unavoidable as the situation will have a serious influence on public security. Following such a request, the Prime Minister can order the SDF to mobilize when a situation calls for such action.

 See Part III, Chapter 1, Section 2-3 (Response to Attacks by Guerrillas, Special Operations Forces and Others), p. 271

2 Maritime Security Operations

When there is a special need to protect lives or property or maintain public security at sea, the Minister of Defense can order the SDF units to take necessary actions at sea upon approval by the Prime Minister.

 See Part III, Chapter 1, Section 1-3 (Measures against Violation of Japan's Sovereignty), p. 253

3 Counter-Piracy Operations

When there is a special need to respond to acts of piracy, the Minister of Defense may order SDF units to conduct operations at sea against such acts upon approval by the Prime Minister.


 See Part III, Chapter 3, Section 2-2 (Counter-Piracy Operations), p. 391

4 Destruction Measures against Ballistic Missiles or Other Objects

In cases where ballistic missiles or other objects are flying to Japan as an armed attack or flying to Japan in a Survival-Threatening Situation, and where the “Three Conditions” are met, the SDF can respond with the defense operation. In cases where ballistic missiles or other objects are flying to Japan but which are not found


as an armed attack, the Minister of Defense can take the following measures:

- (1) If the Minister of Defense judges that ballistic missiles or other objects are likely to fly to Japan and that it is necessary to prevent damage to human lives and property due to its fall in the territory of Japan, the Minister, upon the approval of the Prime Minister, can order the SDF units to take measures to destroy the ballistic missiles or other objects actually flying to the country in the airspace over the territory of Japan or the high seas.
- (2) In addition to the cases of (1) above, there may be cases where the situation suddenly changes with little information available on the launch, for example, and the Minister of Defense cannot have time to obtain approval from the Prime Minister. In preparation for such cases, the Minister of Defense may create an emergency response manual beforehand and obtain approval from the Prime Minister. Following the emergency response manual, the Minister of Defense can order, for a specified period of time, the SDF units to take measures to destroy ballistic missiles or other objects in the airspace over the territory of Japan or the high seas when such objects are actually flying to the country.

 See Fig. II-5-1-3 (Flow of Response to Ballistic Missiles or Other Objects)
Part III, Chapter 1, Section 2-2 (Response to Missile Attacks), p. 265

5 Measures against Intrusion of Territorial Airspace

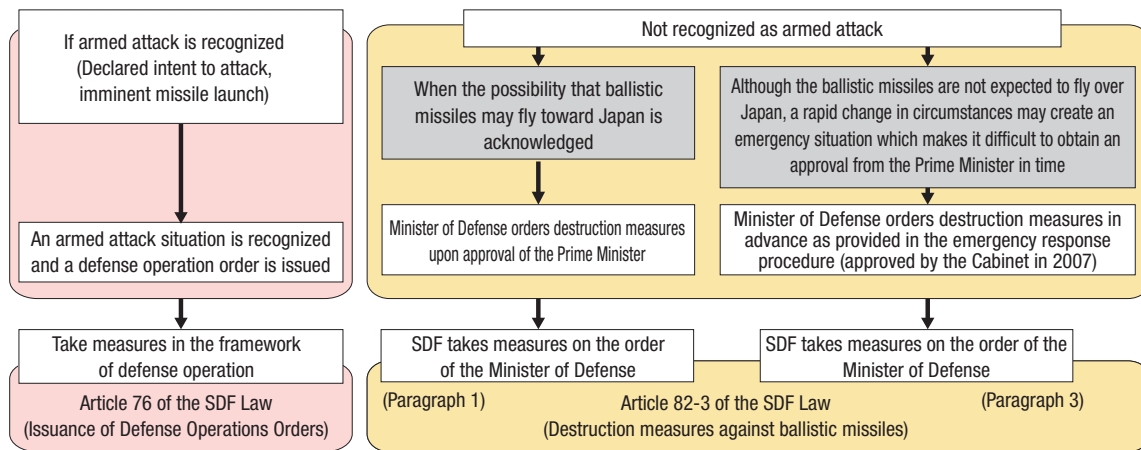
The Minister of Defense may order SDF units to take necessary measures to make intruding aircraft land or withdraw from the territorial airspace of Japan (guiding intruders away, issuing radio transmission warnings, use of weapons, etc.) when a foreign aircraft intrudes Japan's territorial airspace in violation of international law, the provisions of the Aviation Law or other relevant laws and regulations.

 See Part III, Chapter 1, Section 1-3-1 (Warnings and Scrambles in Preparation against Intrusion of Territorial Airspace), p. 253

6 Rescue and Transportation of Japanese Nationals Overseas

In order to protect Japanese nationals, etc. overseas in emergency situations, the SDF is able to transport those

Fig. II-5-1-3 Flow of Response to Ballistic Missiles or Other Objects



Concept of ensuring civilian control of the military

- Response against ballistic missiles requires the government to assess the possibility of missiles flying toward Japan by comprehensively analyzing and evaluating the specific situation and international circumstances. In addition to the SDF destroying the missile, interagency actions are required, for example, measures for civil protection such as alert and evacuation, diplomatic activities, information gathering by related agencies, and enhancement of readiness for emergencies.
- In view of the importance of the matter and the necessity of action by the Japanese government as a whole, the Cabinet and Minister of Defense can sufficiently fulfill their responsibilities upon the Prime Minister's approval (Cabinet decision) and orders by the Minister of Defense. Furthermore, the supervision of the Diet is also defined with a provision in the law stipulating reporting to the Diet.

people who need protection of their lives or bodies to a safe place. Moreover, when their lives or bodies can be harmed, upon a request from the Minister for Foreign Affairs and after subsequent consultations between the Minister for Foreign Affairs and the Minister of Defense, as well as approval by the Prime Minister, the SDF may conduct “rescue measures” that include guarding and rescue of Japanese nationals, etc. if the following requirements are satisfied.

- a. It needs to be confirmed that in the areas where the rescue measures are taken, the competent authorities of the country concerned are maintaining public safety and order at the time, and no act of combat will be conducted;
- b. The country concerned¹⁰ consents to the SDF taking the rescue measures (including the use of weapons); and
- c. It is expected that coordination and cooperation can be ensured between the units of the SDF and the competent authority of the country concerned in order to carry out the rescue measures as smoothly and safely as possible in response to anticipated dangers.

See Part III, Chapter 1, Section 4-2 (Response to Rescue and Transport of Japanese Nationals Overseas, etc.), p. 299

7 Protection of Weapons and Other Equipment of the Units of the U.S. Forces and the Armed Forces of Other Foreign Countries

Based on Article 95-2 of the SDF Law, it has been established that the SDF personnel may protect weapons and other equipment of the units of the U.S. Forces and the armed forces of other foreign countries actually engaging in activities that contribute to the defense of Japan in cooperation with the SDF.

The basic principles of the article and the Cabinet's involvement in its operation are provided by “The Implementation Guidelines for Article 95-2 of the Self-Defense Forces Law”¹¹ decided by the National Security Council. An outline of the guidelines is as follows:

(1) Purpose of Article 95-2

Protection under this Article applies to weapons, etc. of the units of the United States Forces, armed forces of other foreign countries and other similar organizations that are, in cooperation with the SDF, actually engaged in activities that contribute to the defense of Japan (including bilateral/multilateral exercises but excluding activities in the scene where the combat activities are actually being conducted). This Article is to enable SDF personnel to carry out very passive and limited use of weapons to the minimum extent necessary to protect important material means which constitute the defense

¹⁰ It includes an organization, if any, that administers the said country in accordance with a resolution of the General Assembly or the Security Council of the UN.

¹¹ For “The Implementation Guidelines for Article 95 -2 of the Self-Defense Forces Law,” see the MOD website (https://www.mod.go.jp/j/approach/defense/pdf/20170518_01.pdf)

capability of Japan from infringements which do not amount to an armed attack.

(2) Activities that Contribute to the Defense of Japan

“Activities that contribute to the defense of Japan” include mainly the following ones, while the Government of Japan is to examine each activity on a case-by-case basis: (1) intelligence, surveillance, and reconnaissance (ISR) activities including ballistic missile alert; (2) transportation and replenishment activities in situations that will have an important influence on Japan’s peace and security; and (3) bilateral/multilateral exercises to enhance capabilities required for defending Japan.

(3) Judgment on Whether or Not to Conduct Protection


When the Minister of Defense receives a request from the U.S. Forces, etc., the Minister subjectively should judge whether the relevant activities are “activities that contribute to the defense of Japan” and whether protection is necessary, by considering the objective and content of the activities, capability of the unit, and surrounding circumstances as well as the impacts on performance of the SDF’s regular operations.

(4) Involvement of the Cabinet

Requests from the U.S. Forces, etc. should be deliberated in the NSC before the Minister of Defense judges on conducting protection if the Minister receives requests in the following cases. However, in urgent cases, the Minister should promptly report to the NSC.

- (1) The U.S. Forces, etc. makes a request for the first time.
- (2) The request is made for protection in the territory of a third country.
- (3) The request is recognized as particularly important, although not falling under the above two categories.

In addition, in case protection under the situations that will have an important influence is requested, the Prime Minister should clearly state it in the Basic Plan and should ask for a Cabinet decision on it after deliberations in the NSC.

 See Part III, Chapter 1, Section 5-2 (Track Record of Protection of Weapons and Other Equipment of the Units of the U.S. Forces and the Armed Forces of Other Countries [SDF Law Article 95-2]), p. 301

4 Disaster Relief Dispatches and Others

1 Disaster Relief Dispatches

In principle, Disaster Relief Dispatch is conducted as follows: prefectural governors or other officials ask the Minister of Defense, or an officer designated by the Minister, to dispatch the SDF units, etc., in the event of a natural disaster; the Minister or the designated officer will make a judgement based on a comprehensive consideration of three conditions (urgency, lack of alternatives, public good) and dispatch the units if it is deemed necessary for the SDF to respond to the disaster.¹² This procedure is based on the idea that prefectural governors and other officials should grasp the overall conditions of the disaster and their own disaster relief capabilities first, and then decide whether to make a request for the SDF disaster relief dispatch.

2 Earthquake Disaster Prevention Dispatch and Nuclear Disaster Relief Dispatch

When a warning declaration is issued based on the Act on Special Measures Concerning Countermeasures for Large-Scale Earthquakes¹³ or a declaration of a nuclear emergency situation is issued based on the Act on Special Measures Concerning Nuclear Emergency Preparedness, the Minister of Defense is authorized to order dispatching units upon a request of the Director of the Seismic Disaster Warning Headquarters or the Director of the Nuclear Disaster Countermeasures Headquarters (the Prime Minister).

 See Part III, Chapter 1, Section 4 (Response to Large-Scale Disasters, etc. [Including response to COVID-19]), p. 291

¹² The Commandant of the Japan Coast Guard, the Director General of the Regional Coast Guard Headquarters, and the Director of the Airport Administrative Office may request a disaster relief dispatch. With regard to disaster relief dispatch, earthquake disaster prevention dispatch, and nuclear disaster relief dispatch, (1) SDF personnel ordered for the dispatch may take measures such as evacuation (Article 4 of the Police Duties Execution Law) based on Article 94 of the SDF Law (Authority in Disaster Relief Dispatch, etc.); (2) SDF Reserve Personnel and SDF Ready Reserve Personnel may be called up for service in the event of disaster relief dispatch, and SDF Ready Personnel in the event of earthquake disaster prevention dispatch or nuclear disaster relief dispatch; and (3) special units may be temporarily formed as necessary.

¹³ The Prime Minister issues an earthquake alert with the endorsement of the Cabinet in the event that an earthquake prediction was reported by the Director-General of the Japan Meteorological Agency (JMA) and when it is deemed necessary to urgently implement emergency earthquake disaster prevention measures.

5 Framework for Contributing to the Peace and Stability of the International Community

1 Response to Situations Threatening the International Peace and Security that the International Community Is Collectively Addressing

Under the International Peace Support Act,¹⁴ in order to ensure peace and security of the international community, Japan is allowed to conduct cooperation and support operations for the armed forces of foreign countries engaged in operations for international peace and security in Situations Threatening the International Peace and Security that the International Community is Collectively Addressing.¹⁵ From the perspective of enabling seamless responses to any situation, the International Peace Support Law, enacted as a general law, enables Japan to conduct operations more expeditiously and effectively, making it possible to proactively contribute to international peace and security on Japan's own initiative.

(1) Requirements

The requirement for Japan to offer cooperation and support to the operations of foreign armed forces is the issuance of one of the following UN resolutions (by the General Assembly or the Security Council).

- a. Resolutions that decide, call upon, recommend or authorize the country, which is subject to Japan's support operations to respond to situations that threaten the peace and security of the international community
- b. Other than (a), resolutions that regard the situations as a threat to peace or a breach of peace and call on United Nations (UN) member states to respond to the situations concerned

(2) Response Measures

The following response measures can be implemented in situations threatening the international peace and security that the international community is collectively addressing.

a. Cooperation and Support Activities

Supplies and services to armed forces of foreign countries (supply, transportation, repair and maintenance, medical services, communications, airport and seaport services, base services, lodging, storage, use of facilities, training services and construction) are to be provided.

While the provision of weapons is not included as in the Law Concerning Measures to Ensure the Peace and Security of Japan in Situations that Will Have an Important Influence on Japan's Peace and Security, the revised law now allows the "provision of ammunition" and "refueling and maintenance of aircraft ready to take off for combat operations."

b. Search and Rescue Activities

c. Ship Inspection Operations¹⁶ (Those Set Forth in the Ship Inspection Operations Law)

(3) Measures to Avoid Integration with the Use of Force

The following measures are set forth in order to avoid integration with the use of force by a foreign country and also to ensure the safety of SDF personnel:

- Japan does not implement support activities in the scene where a combat is actually taking place. However, when the personnel having been stranded have already been found and rescue operations have commenced, the SDF units are allowed to continue search and rescue activities concerning them as long as the safety of these units is ensured.
- The commanding officers of the SDF units, etc., order a temporary suspension of support activities if combat operations occur or are expected to occur at the site of their activities or in the vicinity.
- The Minister of Defense designates the area for implementing activities, and if it is deemed difficult to implement operations smoothly and safely in the whole or part of that area, the Minister must promptly change the designation of the area or order the cessation of the activities being implemented there.

2 International Peace Cooperation Activities

The International Peace Cooperation Act¹⁷ is aimed at enabling active contribution by Japan to international peace efforts centering upon the United Nations. It is to set forth a framework for the Implementation of International Peace Cooperation Assignments, with a view to extending appropriate and prompt cooperation for efforts such as United Nations Peacekeeping Operations¹⁸ and Internationally Coordinated Operations for Peace and

¹⁴ Official title: Law Concerning Cooperation and Support Activities to Armed Forces of Foreign Countries, etc. in Situations where the International Community is Collectively Addressing for Peace and Security

¹⁵ These refer to situations that threaten the peace and security of the international community, and the international community is collectively addressing the situations in accordance with the objectives of the UN Charter to remove the threat; Japan, as a member of the international community, needs to independently and proactively contribute to these activities

¹⁶ Official title: Law Concerning Ship Inspection Operations in Situations that Will Have an Important Influence on Japan's Peace and Security and Other Situations

¹⁷ Official title: Act on Cooperation with United Nations Peacekeeping Operations and Other Operations

¹⁸ "United Nations Peacekeeping Operations" means the operations that are conducted under the control of the United Nations to respond to conflicts and maintain international peace and security, and that are implemented by two or more participating countries at the request of the Secretary-General of the United Nations, and with the consent of the Parties to Armed Conflict, etc.

Security,¹⁹ and to take measures to extend contributions in kind for those operations.

(1) Requirements for Participation

a. UN PKO

The so-called Five Principles for Participation in PKO²⁰ constitute Japan's basic policy for participation in UN PKOs. On that basis, the International Peace Cooperation Act stipulates that the consent for acceptance of countries to which the areas where these operations are conducted belong needs to be recognized as being stably maintained throughout the period of the operations if the SDF conducts so-called safety-ensuring operations or so-called kaketsuke-keigo operations.

b. Internationally Coordinated Operations for Peace and Security

Japan is able to participate in Internationally Coordinated Operations for Peace and Security whose nature or details are similar to those of UN PKO, when any of the following conditions is satisfied, in addition to the fulfillment of the Five Principles for Participation.

- (1) Based on resolutions of the General Assembly, the Security Council, or the Economic and Social Council of the UN
- (2) At the requests of any of the following international organizations:
 - The UN
 - Organs established by the UN General Assembly or Specialized Agencies, Funds and Programmes of the UN such as the Office of the UN High Commissioner for Refugees or otherwise specified by a Cabinet Order
 - Regional organizations, as prescribed in Article 52 of the UN Charter or organs established by multilateral treaties, acknowledged as having the actual achievements or expertise pertaining to the activities of Internationally Coordinated Operations for Peace and Security such as the European Union or otherwise specified by a Cabinet Order
- (3) At the requests of the countries to which the areas where those operations are to be conducted belong (limited to only those cases that are supported by any of the principal organs of the UN as prescribed in Article 7 (1) of the UN Charter).

(2) Description of Tasks

- Ceasefire monitoring and humanitarian relief operations for afflicted people
- Monitoring, stationing, patrol, inspections at checkpoints and security escort for the protection of safety of specified areas including prevention and suppression of injury or harm against lives, bodies and property of local population, afflicted people and other populations requiring protection (so-called "safety-ensuring" operations)
- Protection of lives and bodies of individuals engaging in international peace cooperation operations or providing support for those operations, in response to urgent requests when unexpected dangers to lives or bodies of such individuals related to operations occur or are imminent (so-called "kaketsuke-keigo" operations)
- Tasks such as provision of advice or guidance related to works for the purpose of assisting in establishing or reestablishing organizations of the Government relating to national defense or other organizations
- Tasks conducted at organizations for supervision and coordination of tasks to include planning, drafting, coordination or collection and updating of information in Headquarters Office or coordination offices conducting UN PKO and Internationally Coordinated Operations for Peace and Security, for the implementation of tasks (of mission headquarters' operations)

(3) Others

- Dispatch of uniformed SDF personnel to the UN (dispatch of Force Commanders of UN PKO)
It is possible to dispatch uniformed SDF personnel and have them engage in the tasks of the UN and those concerning overall management of tasks implemented by units of the SDF, etc., or units of armed forces of foreign states participating in UN PKO, at the request of the UN, with the consent of the Prime Minister.²¹
- Provision of supplies and services to the U.S. Forces, etc., for their operations to cope with large-scale disaster
It is possible for the SDF to provide the U.S. Forces, the Australian Defence Force, or the Armed Forces of the U.K., Canada or France with supplies or services when they request the provision and are located in an area together with the units of the SDF, etc., and is undertaking

¹⁹ "Internationally Coordinated Operations for Peace and Security" means the operations other than those implemented as United Nations Peacekeeping Operations to respond to conflicts and maintain international peace and security, provided that such operations are implemented under the coordination of two or more participating countries, and with the consent of the Parties to Armed Conflict, etc.

²⁰ (1) Agreements on a ceasefire shall have been reached among the Parties to Armed Conflict; (2) Consent for the conduct of UN PKO as well as Japan's participation in such operations shall have been obtained from the countries to which the areas where those operations are to be conducted belong as well as from the Parties to Armed Conflict; (3) The operations shall strictly maintain impartiality, and not favor any of the parties to the armed conflict; (4) Should any of the requirements in the above-mentioned guideline cease to be satisfied, the International Peace Cooperation Corps participating from Japan may terminate the International Peace Cooperation Assignments; and (5) The use of weapons shall be limited to the minimum necessity for the protection of the lives of personnel dispatched, in principle.

²¹ The dispatch of uniformed SDF personnel is limited to cases where the consent of the countries hosting the UN PKO for which the dispatched uniformed SDF personnel will conduct operations and of state parties to the conflict regarding the implementation of the UN PKO (when the state parties to the conflict are nonexistent, the consent of the countries where the UN PKO is to be conducted) is deemed to be stably maintained throughout the duration of the dispatch and where circumstances that lead to the suspension of the dispatch are deemed unlikely to occur.

Column

Overview of Various Contingencies

The security environment Japan finds itself in is becoming more and more severe.

Under such circumstances, the most important responsibility of the government is to resolutely secure the lives and peaceful livelihoods of its people under any situation. The 2015 Legislation for Peace and Security defined new situations to be addressed, such as “Survival-Threatening Situations” and “Situation that Will Have an Important Influence”, enabling seamless response to any situation. The law clarifies, among

other things, the circumstances in which the Self-Defense Forces should operate and the nature of its activities in response to each situation, ensuring the peace and security of Japan and the international community.

The Japanese Government will continue to operate the Legislation for Peace and Security in an effective manner, maintaining a sense of urgency to take all possible measures to resolutely secure the lives and peaceful livelihoods of its people under any situation.

	Definitions	Primary measures that the SDF can take
Armed Attack Situations	The situations in which an armed attack against Japan from outside occurs or in which it is considered that there is an imminent and clear danger of an armed attack. [Article 2, Item 2 of the Armed Attack Situation Response Law]	- Defense Operation [Article 76, Paragraph 1 of SDF Law] - Defense call-up order and civil protection call-up order for SDF Reserve Personnel [Article 70 of SDF Law] - Defense call-up order and civil protection call-up order for SDF Ready Reserve Personnel [Article 75-4 of SDF Law] - Civil protection dispatch [Article 77-4 of SDF Law] etc.
Survival-Threatening Situations	The situation in which an armed attack against a foreign country that is in a close relationship with Japan occurs, which in turn poses a clear risk of threatening Japan's survival and of overturning people's rights to life, liberty and pursuit of happiness fundamentally. [Article 2, Item 4 of the Armed Attack Situation Response Law]	- Defense Operation [Article 76, Paragraph 1 of SDF Law] - Defense call-up order and civil protection call-up order for SDF Reserve Personnel [Article 70 of SDF Law] - Defense call-up order and civil protection call-up order for SDF Ready Reserve Personnel [Article 75-4 of SDF Law] etc.
Anticipated Armed Attack Situations	The situations in which an armed attack is not yet made but the tension increased and an armed attack is anticipated. [Article 2, Item 3 of the Armed Attack Situation Response Law]	- Defense Operation Alert Order [Article 77 of SDF Law] - Defense call-up order and civil protection call-up order for SDF Reserve Personnel [Article 70 of SDF Law] - Defense call-up order and civil protection call-up order for SDF Ready Reserve Personnel [Article 75-4 of SDF Law] - Construction of Defensive Facilities (Positions, etc.) in the intended deployment area [Article 77-2 of SDF Law]. - Civil protection dispatch [Article 77-4 of SDF Law] etc.
Situations that will have an important influence	The situations that will have an important influence on Japan's peace and security, including situations that, if left without response, could lead to a direct armed attack on Japan. [Article 1 of the Act on the Prevention of Significant Impacts]	- Provision of Goods and Services as logistics support activities [Article 84-5 of SDF Law]

Note: In addition to the above, the following actions can be taken against aggression that do not amount to an armed attack
Public security operation by order [Article 78 of SDF Law], Public security operation by request [Article 81 of SDF Law], Maritime security operations [Article 82 of SDF Law], Guarding operation [Article 81-2 of SDF Law], Destruction measures against ballistic missiles, etc. [Article 82-3 of SDF Law], Action against violation of territorial airspace [Article 84 of SDF Law], etc.

operations to cope with large-scale disasters, so far as it does not hinder the performance of International Peace Cooperation Assignments, etc., of the SDF.


 Part III, Chapter 3, Section 5 (Efforts to Support International Peace Cooperation Activities), p. 402

3 International Disaster Relief Activities

The Japan Disaster Relief Team Law²² stipulates measures necessary for dispatching the Japan Disaster Relief Team to provide rescue activities and medical services in

response to large-scale disasters overseas, especially in less-developed regions.

The Minister for Foreign Affairs may consult the Minister of Defense with regard to operations of SDF units if there is a special need. The Minister of Defense can order units of the SDF to carry out rescue and medical activities as well as transportation of personnel and supplies based on the consultation above.²³

 Part III, Chapter 3, Section 5-3 (International Disaster Relief Activities), p. 409

22 Official title: Law Concerning the Dispatch of the Japan Disaster Relief Team

23 The Japan Disaster Relief Team is not to be dispatched if the use of weapons is recognized to be necessary in order to protect the lives and bodies of people engaged in international disaster relief operations or transport, and equipment necessary for such operations due to apparent danger in accordance with the level of security in the disaster-affected country. Therefore, members of the team will not carry weapons in the country concerned for the purpose of protecting the lives and bodies of people engaged in international disaster relief operations and equipment necessary for such operations.

The Ministry of Defense and Self Defense Forces are national administrative entities and obviously require a legal basis in carrying out their respective duties. The Act for Establishment of the Ministry of Defense defines the administrative scope of the Ministry of Defense, and Article 5 of the Act states that the Self Defense Forces Law determines the duties, actions, and authority of the Self Defense Forces. The Self Defense Forces Law provides a list (similar to an index) of what the Self Defense Forces are allowed to do in accordance with specified procedures to address various situations.

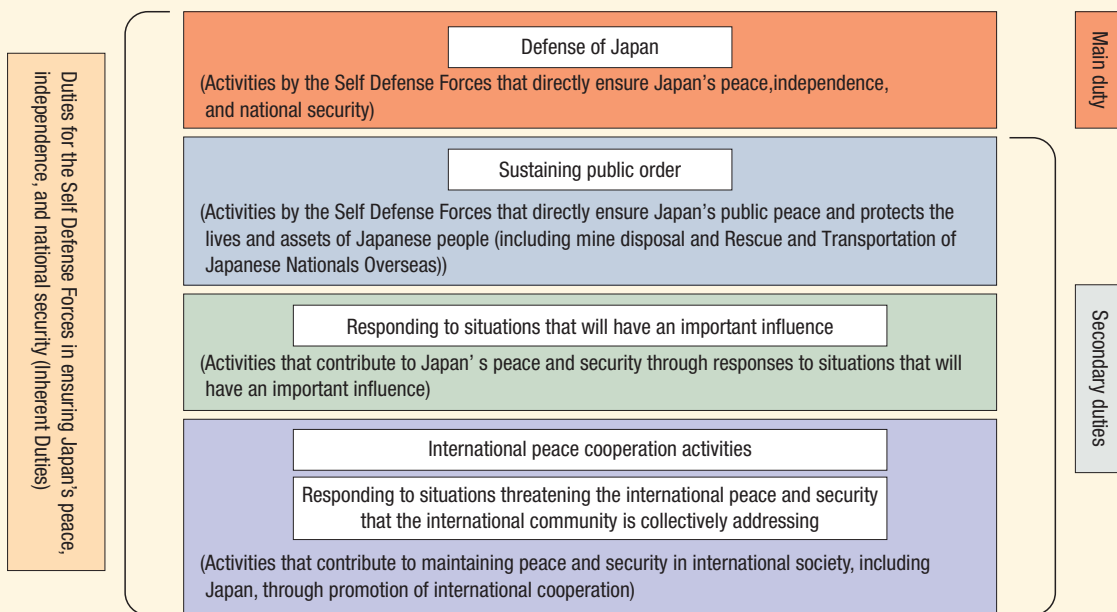
Article 3 in the Self Defense Forces Law divides the duties of the Self Defense Forces into main duties (item 1 of the same article) and secondary duties (items 1 and 2 of the same article). Defense actions to defend Japan correspond to main duties, and only the Self Defense Forces carry out these duties.

Secondary duties consist of “duties for maintaining public order as necessary” (secondary duties under item 1) and duties defined by other laws “to an extent that does not interfere with performance of the main duties” (secondary duties

under item 2). The former includes public security operations that police entities cannot handle alone, maritime security operations, destruction measures against ballistic missiles and other weapons, disaster relief dispatches, and measures against intrusion of territorial airspace. The latter covers responses to situations that will have an important influence (logistics support activities), international peace cooperation activities (international peace cooperation operations and international disaster relief operations), and activities related to Internationally Coordinated Operations for Peace and Security (Cooperation and Support Activities, etc.). These main and secondary duties are jointly known as “inherent duties.”

Activities handled by the Self Defense Forces on the basis that it is appropriate to utilize skills, experience, and organizational functions cultivated by the Self Defense Forces over many years are known as “additional duties” (separate from inherent duties). These include transportation for national guests, education and training consignments, and cooperation with athletic events.

Overview of the Self Defense Forces' duties



Part

III

Three Pillars of Japan's Defense (Means to Achieve the Objectives of Defense)

Chapter 1

Japan's Own Architecture for National Defense

Chapter 2

Japan-U.S. Alliance

Chapter 3

Security Cooperation

Japan's Own Architecture for National Defense

1 Significance of Defense Capability

Defense capability is the ultimate guarantor of Japan's national security. Defense capability represents Japan's will and ability to: deter threat from reaching Japan; and should threat reach Japan, eliminate the threat and, as a sovereign nation, by exerting efforts on its own accord and initiative, defend to the end Japanese nationals' life, person and property as well as territorial land, waters and airspace.

At the same time, defense capability is essential for Japan to play on its initiative its roles in the Japan-U.S. Alliance at all phases from peacetime to armed contingencies. Strengthening Japan's defense capability to provide for national security is none other than strengthening the Japan-U.S. Alliance. Defense capability is essential also for advancing Japan's efforts in security cooperation with other countries.

Defense capability is the most important strength for Japan in retaining self-sustained existence as a sovereign nation amid security environment it has never faced before. Japan must strengthen this capability on its own accord and initiative.

The NDPG states that, in order to create a security environment desirable for Japan and to deter and counter threats, Japan's defense capability must be able to serve the following six roles in a seamless and combined manner: (1) response from peacetime to "gray-zone" situations; (2) countering attacks against Japan, including its remote islands; (3) response in space, cyber and electromagnetic domains during all phases; (4) response to large-scale disasters, etc.; (5) cooperation with the United States based on the Japan-U.S. Alliance; and (6) promotion of security cooperation.

In particular, in view of protecting the lives and peaceful livelihoods of Japanese nationals, it is all the more important for Japan's defense capability to fulfill diverse roles on a steady-state basis.

2 Significance of Land Defense Capability

Land defense capability is the defense capability to directly protect the territory and the people.

Land defense capability covers a variety of efforts to protect Japan to the end, including peacetime surveillance

operations, training in collaboration with the police, strengthening maneuver and deployment capabilities, and reinforcing cyber and electromagnetic spectrum operations capabilities. Additionally, it contributes to strengthening the Japan-U.S. Alliance through exchanges and training with the U.S. Marine Corps and the U.S. Army, and to promoting security cooperation through international peace cooperation activities and capacity building support.

Land defense capability is responsible for defense security in land domains, and through its existence, daily training and other activities, it responds to "gray-zone situations" and suppress escalations of those situations, and, if the other party attempts to quickly create a fait accompli via short-term invasion, it will eliminate the invasions via strong and unyielding operations.

In addition, because the land defense capability has self-sufficiency abilities, it can conduct a wide range of duties such as disaster relief and international peace cooperation activities, and it can also contribute to the stability of people's lives and the development of defense bases while maintaining close relationships with the region.

3 Significance of Maritime Defense Capability

Maritime defense capability is the defense capability to ensure the safety of maritime traffic and create a desirable security environment, in addition to protecting Japan's domain and surrounding waters from maritime invasions.

Japan is surrounded on all sides by the sea, and because of this geographic characteristic, any invasion from another country must be via the sea. Japan's maritime defense capability has the role of deterring and eliminating other countries' invasions into Japan's domain and surroundings waters at sea, which includes not only dealing with armed attack situations, but also steady-state basis surveillance operations and intelligence operations in the surrounding waters.

Additionally, marine defense capability has the role of maintaining order in the ocean, such as ensuring the safety of maritime traffic, and are conducting counter-piracy activities and deployment information gathering activities in the Middle East.

Furthermore, in order to create a desirable security

environment by taking advantage of the fact that the maritime defense capability is the most international defense capability, it carries out defense cooperation and exchanges, such as port calls for ships/aircraft and joint/goodwill training at sea, as well as international emergency relief activities, etc., in cooperation with other defense capabilities.

In addition, utilizing those capabilities, the maritime defense capability performs duties such as disaster relief, underwater mine removal, international peace cooperation activities, and cooperation for Antarctic research.

4 Significance of Air Defense Capability

Air defense capability, primarily aircraft, radar, and missiles, is the defense capability regarding air owned by the state.

The air domain covers the land and maritime domains, and is connected to the space domain, so the air defense capability, as a bridge for integrated operations spanning domains that enable the demonstration of C4ISR capabilities and the projection of various defense capabilities into other domains, plays an important role in protecting Japan to the end. Additionally, the air defense capability is consistently responsible for the peace and security of Japan's skies from peacetime to emergencies.

The success or failure of air operations is considered to be an important factor in determining the outcome of operations in general, so the air defense capability has the role of conducting monitoring and surveillance operations and performing operations such as landing and invasion prevention and ground support along with air defense operations.

Additionally, Japan's air defense capability adopts and implements measures against airspace violations from peacetime, and, utilizing these capabilities, carries out duties such as disaster relief and international peace cooperation activities.

Furthermore, it contributes to the stable use of not only the air domain, but also the space domain.

5 Future Defense Capabilities

As the security environment surrounding Japan is becoming more severe and uncertain at a remarkably fast rate, the NDPG, for future defense capabilities, will organically integrate capabilities in all domains, including space, cyber, and electromagnetic spectrum, while strengthening the quality and quantity of capabilities in individual domains, and, even if the capability in an individual domain is inferior, in the NDPG it will be necessary to overcome this and be able to complete the defense of Japan via cross-domain operations that amplify capabilities as a whole through the synergistic effects.

For this reason, with regards to strengthening Japan's own defense posture, capabilities in all domains, including space, cyber, and electromagnetic spectrum, will be organically integrated to build a Multi-domain Defense Force as a truly effective defense capability that enables the constant and continuous implementation of flexible and strategic activities at every stage from peacetime to emergencies.

Additionally, in order for Japan's defense capability to completely fulfill its role, integrated operations, in which the SDF organically cooperates and quickly and efficiently carries out its duties, will be extremely important.

Therefore, since March 2006, the functions of the integrated operations system have been strengthened by transferring operational functions to the Joint Staff, transitioned from a posture based on individual operation of the SDF. In today's security environment, it is becoming more important than ever to know how to organically integrate and operate the land, maritime, and air defense capabilities so as to enable effective implementation of cross-domain operations including space, cyber, and electromagnetic spectrum.

Among the roles that must be served by Japan's defense capability as set forth in the NDPG, the idea of "(1) response from peacetime to 'gray-zone' situations" is as follows.

The Self-Defense Forces (SDF) will enhance its presence on a steady-state basis by actively engaging in, among others, bilateral/multilateral training and exercises and overseas port visits, thereby demonstrating Japan's will and capability. The SDF will, in close integration

with diplomacy, promote strategic communications, including the aforementioned activities by SDF units.

The SDF will leverage its capabilities in all domains to conduct wide-area, persistent intelligence, surveillance and reconnaissance (hereinafter referred to as "persistent ISR") activities around Japan. The SDF will prevent the occurrence or escalation of emergencies by employing flexible deterrent options and other measures. Leveraging posture in place for these activities, the SDF will,

in coordination with the police and other agencies, immediately take appropriate measures in response to actions that violate Japan's sovereignty, including incursions into its territorial airspace and waters.

The SDF will provide persistent protection against incoming ballistic missiles and other threats, and minimize damage should it occur.

 Section 2-2 (Response to Missile Attacks), p. 265

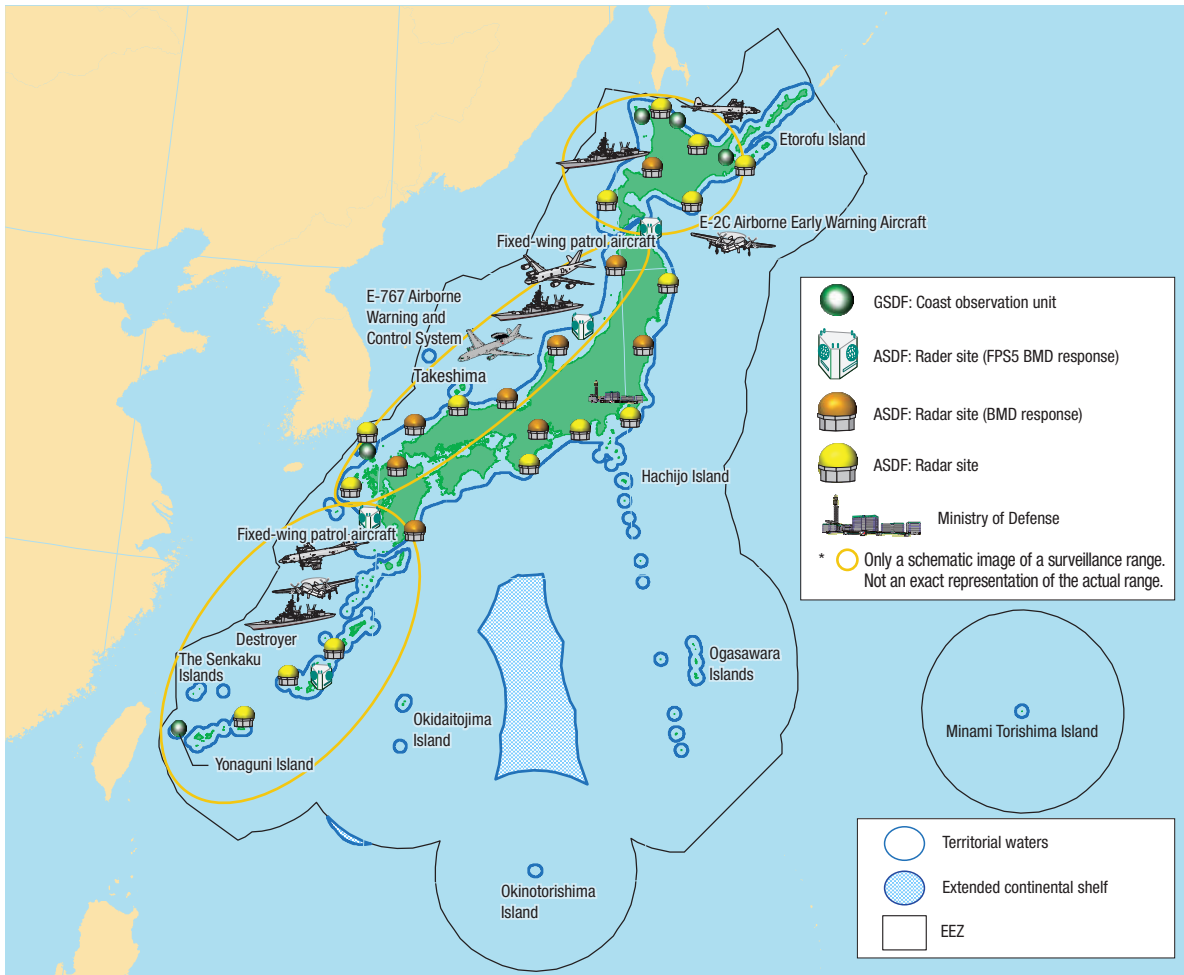
1 Persistent ISR in the Area Surrounding Japan

1 Basic Concept

Japan is comprised of a little over 6,800 islands, and is surrounded by wide sea space, which includes the sixth largest¹ territorial waters (including inland waters) and Exclusive Economic Zone (EEZ) in the world. The

SDF is engaged in persistent intelligence collection and monitoring and surveillance during peacetime over Japan's territorial waters and airspace, as well as the surrounding sea and airspace so that it can respond to various contingencies immediately and seamlessly.

Fig. III-1-1-1 Conceptual Image of Monitoring and Surveillance of the Waters and Airspace Surrounding Japan



¹ Excluding overseas territories. The eighth largest in the world if overseas territories are included.

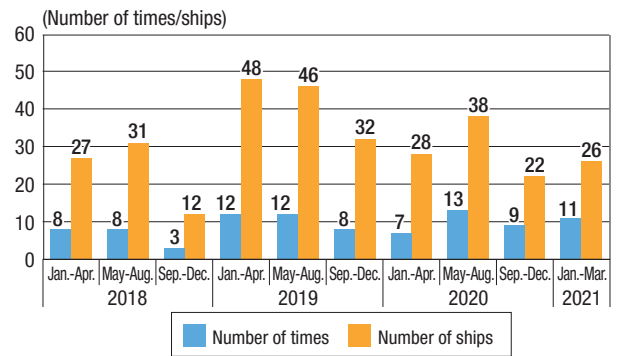
2 Response by the Ministry of Defense (MOD)/SDF

The Maritime Self-Defense Force (MSDF) monitors ships navigating in the waters surrounding Hokkaido, the Sea of Japan, and the East China Sea from peacetime, using patrol aircraft² and other aircraft. The Air Self-Defense Force (ASDF) uses radar sites at 28 locations nationwide, and early warning and control aircraft³ amongst others, to conduct monitoring and surveillance activities over Japan and its surrounding airspace. These activities of the MSDF and ASDF are done 24 hours a day. Monitoring and surveillance activities in major channels are also conducted 24 hours a day by MSDF

guard posts, Ground Self-Defense Force (GSDF) coastal surveillance units, and other assets.⁴ Furthermore, in order to maintain a posture to swiftly respond to various

Fig. III-1-1-2

Number of Incursions into the Territorial Waters Around the Senkaku Islands by Ships Belonging to the China Coast Guard Bureau, etc.



Column

Senkaku Islands, Inherent Part of the Territory of Japan

The Senkaku Islands have always been Japan's territory, both historically and under international law

The Senkaku Islands (Ishigaki City, Okinawa Prefecture) are clearly an inherent part of the territory of Japan, both historically and under international law. Japan actually has effective control of the islands. Therefore, there is no territorial issue to be resolved in the first place.

The Japanese government formally incorporated the Senkaku Islands into its territory in 1895 through a cabinet decision placing them under the jurisdiction of Okinawa Prefecture. China began to make its own claims regarding the Senkaku Islands in the 1970s, after a UN agency pointed out possible oil reserves in the East China Sea in 1968. It had not raised any objections until this point.

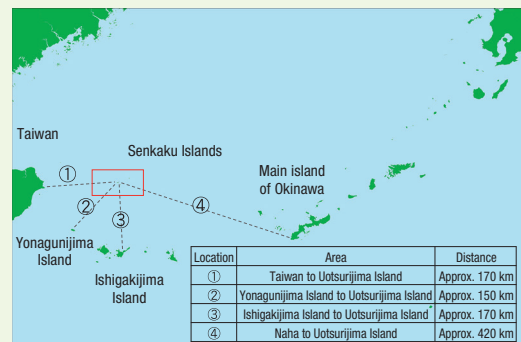
China has continued to intrude into Japan's territorial waters around the Senkaku Islands since 2008, despite Japan's strong protests. It is both regrettable and unacceptable that

in fiscal year 2020, China Coast Guard vessels intruded into Japan's territorial waters around the Senkaku Islands in May, July, August, October, November, and December, as well as in January and February 2021, attempting to approach Japanese fishing vessels sailing in the vicinity. The activities of Chinese maritime patrol vessels, which are asserting their own claims in our territorial waters around the Senkaku Islands, are a violation of international law.

Japan cannot make any concessions to such a unilateral attempt to change the status quo. The MOD and the SDF will continue to deal with this situation calmly and resolutely, in cooperation with the relevant ministries and agencies. They will act with a sense of urgency, performing vigilant surveillance and intelligence operations, based on a policy of calmly and resolutely protecting the lives and property of the people and the territory, territorial waters, and airspace of Japan.



The Senkaku Islands, an inherent territory of Japan
[Website of the Cabinet Secretariat]



² Aircraft for monitoring with the purpose of gathering information and prevent a surprise attack by an opposing force. The MSDF possesses P-3Cs and P-1s as fixed-wing patrol aircraft, and SH-60Js and SH-60Ks as patrol helicopters.
³ Aircraft with warning control systems and radar capable of monitoring omnidirectionally. Being excellent in speed performance and boasting long cruising time, the aircraft is able to fly to distant areas to engage in warning for a long time. Moreover, as it is also able to engage in warning at high altitude, it has outstanding flight performance and the monitoring and surveillance capability, such as a long line-of-sight distance. The ASDF has been operating E-767 aircraft based on civil aircraft B-767.
⁴ Article 4(1)18 of the Act for Establishment of the MOD (Investigation and research required for the performance of duties within jurisdiction) provides the legal basis for early monitoring and surveillance activities by the SDF.



GSDF personnel engaged in monitoring and surveillance activities



Commercial vessel and MSDF P-1 patrol aircraft that is engaging in monitoring and surveillance activities in the waters around Japan

situations, monitoring and surveillance activities are carried out with the flexible use of vessels, aircraft, and so on as required.

The information obtained through such monitoring and surveillance activities is shared with the relevant ministries and agencies, including the Japan Coast Guard, in order to strengthen coordination.

The main events confirmed by the SDF's monitoring and surveillance activities were that, in June 2016, a Chinese Navy combatant vessel first entered Japan's contiguous zone around the Senkaku Islands, and in January 2018, a submerged Chinese Navy submarine and warship were navigating on the same day through Japan's contiguous zone around the Senkaku Islands.

Additionally, in December 2016, December 2019, April 2020, and April 2021, it was confirmed that six Chinese naval vessels, including the aircraft carrier "Liaoning," passed through the sea area between the main island of Okinawa and Miyakojima Island to enter the Pacific, and in April 2018, in waters some 350 km south of Yonaguni Island a number of (presumed) fighter jets were observed taking off from the aircraft carrier "Liaoning" for the first time.

Furthermore, in April 2021 it was confirmed that one early warning helicopter departed from the "Liaoning" and flew in airspace about 50 to 100 km northeast of Taisho



ASDF radar site engaging in monitoring and surveillance activities 24 hours a day, 365 days a year

Island territory in the Senkaku Islands. Moreover, in July 2017 it was confirmed that a Chinese Navy intelligence collection ship entered Japanese territorial waters southwest of Kojima (Matsumae, Hokkaido), passing east through the Tsugaru Strait to the Pacific Ocean.

See Fig. III-1-1-1 (Conceptual Image of Monitoring and Surveillance of the Waters and Airspace Surrounding Japan)
 Fig. III-1-1-2 (Number of Incursions into the Territorial Waters Around the Senkaku Islands by Ships Belonging to the China Coast Guard Bureau, etc.)
 Part I, Chapter 2, Section 2-2 (Military Affairs), p. 58
 Part I, Chapter 2, Section 4-1 (North Korea), p. 97

2 Response to Illicit Ship-to-Ship Transfers

1 Basic Concept

It has been pointed out that North Korea is attempting to evade United Nations (UN) Security Council sanctions through smuggling. As part of its regular monitoring and surveillance activities, the SDF is carrying out information gathering on vessels suspected of violating the UN Security Council sanctions in sea areas surrounding Japan.

2 Response by the Ministry of Defense (MOD)/SDF

During the period from 2018 to the end of March 2021, the MSDF vessels and patrol aircraft have observed 24 cases⁵ of seaborne rendezvous between North Korean tankers and foreign-flagged tankers on the high seas of the East China Sea. The information was shared with

⁵ For a specific example, see the MOD website (<https://www.mod.go.jp/j/approach/defense/sedori/index.html>)

What Are Ship-to-Ship Transfers by North Korea?

The international community has imposed a variety of sanctions on North Korea in an effort to achieve the disarmament of all weapons of mass destruction and ballistic missiles of all ranges. For example, in principle the supply of refined petroleum products to North Korea has been capped at 500,000 barrels per year by the UN Security Council resolution. However, it is believed that for many years North Korea has been attempting to procure refined petroleum products through ship-to-ship transfers at sea, where the international community cannot

easily monitor the situation, and its methods are becoming increasingly sophisticated. As part of its regular monitoring and surveillance activities around Japanese territorial waters, the MOD/SDF is conducting information gathering activities for vessels suspected of violating the UN Security Council sanctions and will continue to cooperate closely with international community to ensure compliance with the UN Security Council resolution.

relevant agencies and ministries each time.

In a comprehensive judgment across the government, the vessels concerned are strongly suspected of engaging in ship-to-ship transfers with the North Korean vessels, which is prohibited by UN Security Council resolution. Japan reported this to the UN Security Council Sanctions Committee on North Korea, shared the information with relevant countries, gave information to the relevant countries regarding the tankers concerned and made public announcements on the subject.

In response to these illicit maritime activities, including ship-to-ship transfers with North Korean vessels prohibited under the UN Security Council resolution, the United States and other concerned countries are carrying out early warning surveillance activities with aircraft using the United States Kadena Air Base in Japan.⁶ Australian, Canadian, French and New Zealand aircraft made patrol flights since April 2018.

In addition, naval vessels of Australia, Canada⁷, France, the United Kingdom and the United States conduct surveillance activities in sea areas surrounding Japan.⁸ The MOD/SDF intend to continue their close cooperation



A North Korea-flagged tanker and a small ship of unidentified nationality confirmed by MSDF P-1 patrol aircraft, which are strongly suspected of committing a ship-to-ship transfer on the high seas of the East China Sea (December 2019)

with concerned countries to ensure compliance with the UN Security Council resolution.



Video: The response to ship-to-ship transfers prohibited by the UN Security Council resolution

URL: https://youtu.be/wpJwQ3Kk_mg

⁶ Canada (for about one month from late April 2018, about one and a half months from late September 2018, about one month from early June 2019, about one month from early October 2019, and about one month from early November 2020), Australia (for about one month from late April 2018, about one and a half months from mid-September 2018, about one week from early December 2018, about one month from May 2019, about one month from early September 2019, about one month from mid-February 2020, about one month from late September 2020, and early to late March 2021), New Zealand (for about one and a half months from mid-September 2018, about one month from mid-October 2019, and about one month from late October 2020), and France (for about three weeks from mid-March 2019) have conducted surveillance activities with aircraft using the United States Kadena Air Base in Japan (as of March 2021).

⁷ At the Japan-Canada summit meeting held on April 28, 2019, Justin Trudeau, Prime Minister of Canada, indicated that Canada will extend the period for dispatch of aircraft and vessels for conducting monitoring and surveillance activities against ship-to-ship transfers of cargo by two years, and Prime Minister Shinzo Abe expressed his gratitude.

⁸ The United Kingdom's naval vessels (early May, from late May to early June, mid-June and mid-December 2018, and early January and from late February to early March, 2019), the Canadian Navy's vessels (early and late October 2018, mid-June and late August 2019, and early October 2020), the Royal Australian Navy's vessels (early October 2018 and early May 2019, and late October 2020) and the French Navy's vessels (from early April to early May 2019, and from mid-February to early March 2021) conducted surveillance activities in sea areas surrounding Japan, including the East China Sea (as of March 31 2021).

3 Measures against Violation of Japan's Sovereignty

1 Warnings and Scrambles in Preparation against Intrusion of Territorial Airspace

(1) Basic Concept

Under international law, countries have complete and exclusive sovereignty over their territorial airspace. Scrambling against aircraft intruding into territorial airspace is conducted as an act to exercise the right of policing intended to maintain public order. Unlike measures taken on land or at sea, this measure can be taken only by the SDF. Therefore, the ASDF is primarily responsible for conducting the actions based on the provisions of Article 84 of the SDF Law.

(2) Response by the MOD/SDF

The ASDF detects and identifies aircraft flying in airspace surrounding Japan using warning and control radars as well as early warning and control aircraft. If any suspicious aircraft heading to Japan's territorial airspace are detected, fighters and other aircraft scramble to approach them in order to confirm the situation and monitor the aircraft as necessary. Furthermore, in the event that this suspicious aircraft has actually intruded into territorial airspace, a warning to leave the airspace would be issued, among other responses.

In FY2020, ASDF aircraft scrambled 725 times.

Breaking this figure down, planes scrambled 458 times in response to Chinese aircraft.

Flight patterns of Chinese military aircraft in recent years have changed, and now their range of activities are

extending to not only the East China Sea, but also the Pacific Ocean and the Sea of Japan.

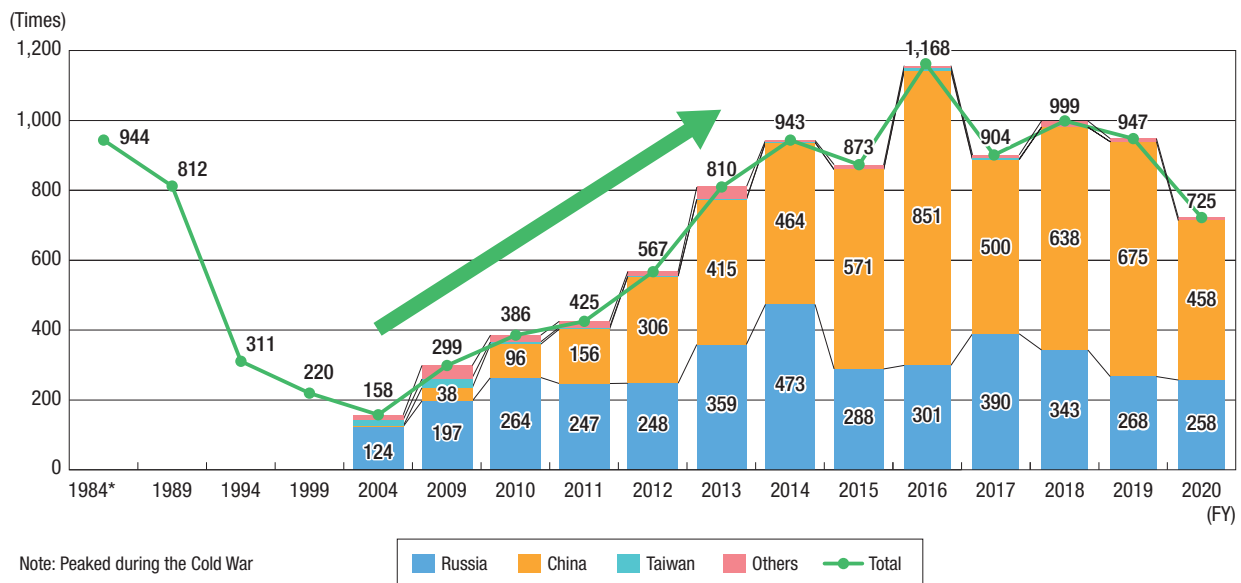
As a distinctive example of Chinese aircraft recently, a situation arose in May 2017 when an object that looked like a small drone caused an airspace violation as it flew above a China Coast Guard vessel entering Japanese territorial waters near the Senkaku Islands. Japan lodged protests against the Chinese government through diplomatic channels. In August that year, six Chinese military bombers were observed in a flight from the East China Sea over the main island of Okinawa and Miyakojima Island northeast across the Pacific to an area off the Kii Peninsula before returning. Then in December, five aircraft including two fighter jets flew over the Tsushima Strait and entered the Japan Sea airspace.⁹ In April 2018, a (presumed) unmanned Chinese aircraft flew across the East China Sea.

Furthermore, in July 2019, two Chinese H-6 bombers and two Russian Tu-95 bombers conducted a joint long-range flight from the Sea of Japan to the East China Sea. Additionally, in December 2020, four Chinese H-6 bombers and two Russian Tu-95 bombers ran a joint long-range flight from the Sea of Japan to the East China Sea and the Pacific Ocean.

In addition, aircraft conducting flights that could be considered as some form of training and/or information gathering activities have been confirmed in the airspace around Japan.

In this way, China is continuing to expand and intensify the activities of its air force in airspace around Japan and

Fig. III-1-1-3 Number and Breakdown of Scrambles since the Cold War



Note: Peaked during the Cold War

⁹ This was the first time that a Chinese fighter has been confirmed entering the Japan Sea airspace.

one-sidedly escalating its actions in some cases. This situation raises a serious concern.

ASDF aircraft scrambled 258 times in response to Russian aircraft.

As a distinctive example, in June 2019, two Tu-95 bombers intruded into Japan’s airspace above the territorial waters of Minamidaitojima Island (Okinawa Prefecture). One of them further intruded into Japan’s airspace above the territorial waters of Hachijojima Island (Tokyo). Japan lodged protests against the Russian government through diplomatic channels.


In July 2019, two Chinese H-6 bombers and two Russian Tu-95 bombers carried out long distance joint flights from the Sea of Japan to the East China Sea. In addition, one Russian A-50 early warning and control aircraft allegedly supporting Tu-95 bombers intruded into Japan’s airspace above the territorial waters of Takeshima Island in Shimane Prefecture. A Korean fighter fired warning shots to the Russian aircraft. Japan lodged protests against the Russian government which intruded into Japan’s airspace and against the Korean government which fired warning shots to the Russian aircraft through diplomatic channel.

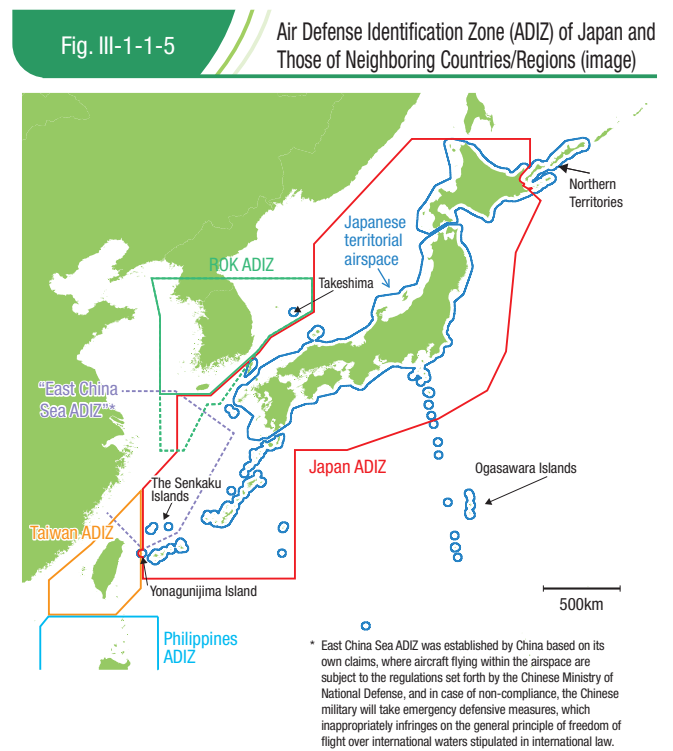
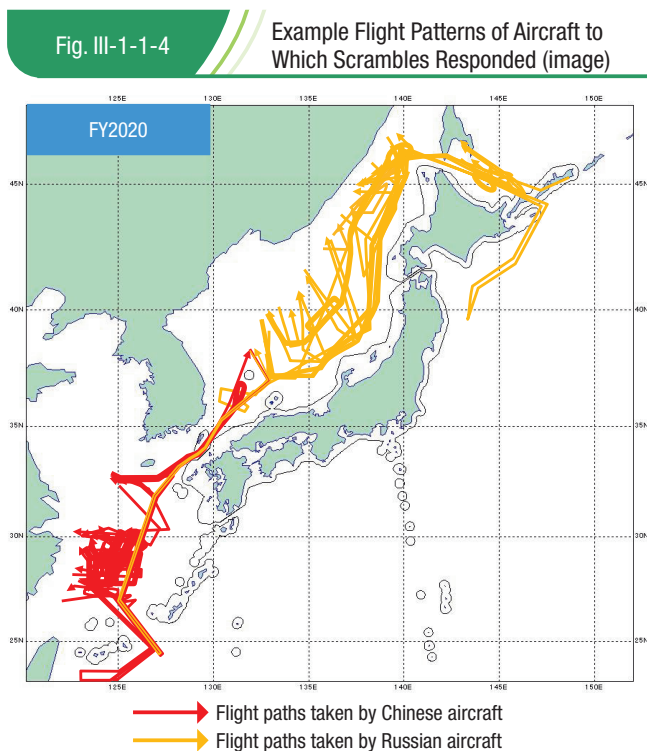
In October 2020, a Mi-8 helicopter intruded into Japan’s airspace above the territorial waters of Shiretoko Peninsula in Hokkaido, and Japan lodged protests against


the Russian government through diplomatic channels. In December 2020, four Chinese H-6 bombers and two Russian Tu-95 bombers conducted a joint long-range flight from the Sea of Japan to the East China Sea and the Pacific Ocean.


Due attention needs to be paid to the activities of Russian aircraft.

Even after the establishment of the “East China Sea Air Defense Identification Zone (ADIZ)” by the Chinese Government in November 2013, the MOD/SDF has conducted monitoring and surveillance activities as before in the East China Sea, including the Chinese ADIZ. The MOD/SDF also engages in strict measures against intrusion of territorial airspace in accordance with international law and the SDF Law, as well as keep conducting thorough monitoring and surveillance activities in the air and sea areas around Japan.

-  Fig. III-1-1-3 (Number and Breakdown of Scrambles since the Cold War)
- Fig. III-1-1-4 (Example Flight Patterns of Aircraft to Which Scrambles Responded [image])
- Fig. III-1-1-5 (Air Defense Identification Zone [ADIZ] of Japan and Those of Neighboring Countries/Regions [image])
- Part I, Chapter 2, Section 2-2 (Military Affairs), p. 58
- Part I, Chapter 2, Section 5-3-6 (Russian Forces in the Vicinity of Japan), p. 126
- Part II, Chapter 5, 3-5 (Measures against Intrusion of Territorial Airspace), p. 238







Video: Fixed-wing patrol aircraft engaged in monitoring and surveillance

URL: https://youtu.be/L9_tExascIc



An ASDF pilot running up to an F-15 fighter aircraft on receiving an order to scramble



F-2 fighter conducting an airspace intrusion counter measure mission

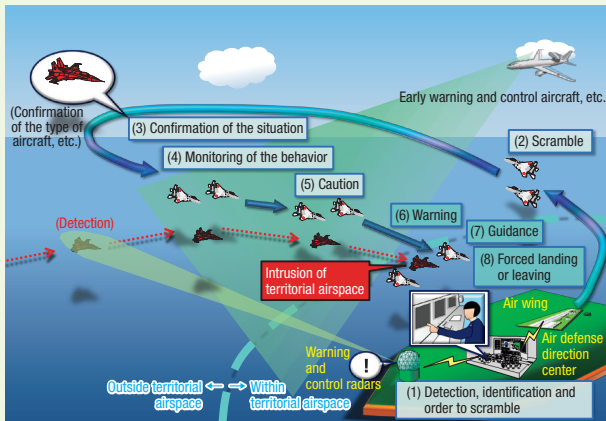
Column

Scrambling against Aircraft Intruding into Japanese Territorial Airspace

Scrambling against aircraft intruding into territorial airspace is a series of actions against aircraft that may violate Japanese airspace or foreign aircraft that have violated Japanese airspace by ordering aircraft scrambles to warn the violating aircraft to leave or land at the nearest airfield. In order to effectively implement measures against intrusion of territorial airspace, an Air Defense Identification Zone (ADIZ) has been

established to identify aircraft flying around Japan.

Although the number of emergency launches has remained high in recent years, the MOD and the Self-Defense Forces will take all possible measures against airspace incursions in accordance with international law and the Self-Defense Forces Law, from the perspective of resolutely protecting Japan's territorial land, waters, and airspace.



Procedures for scrambling against aircraft intruding into territorial airspace (image)



A F-2 fighter aircraft defending Japan's territorial airspace (example)

2 Response to Submarines Submerged in Japan's Territorial Waters

(1) Basic Concept

With respect to foreign submarines navigating underwater in Japan's territorial waters,¹⁰ an order for maritime security operations will be issued. The submarine will be requested to navigate on the surface of the water and show its flag, in accordance with international law, and in the event that the submarine does not comply with the request, the SDF will request it to leave Japanese territorial waters.

See Part II, Chapter 5, 3-2 (Maritime Security Operations), p. 238

(2) Response by the MOD/SDF

The MSDF is maintaining and enhancing capabilities for: expressing its intention not to permit any navigation that violates international law; and responding in shallow water areas by detecting, identifying, and tracking foreign submarines navigating under the territorial waters of Japan. In November 2004, the MSDF observed a submerged Chinese nuclear-powered submarine navigating under Japanese territorial waters around the Sakishima Islands. In response to this incident, the MSDF issued an order for maritime security operations, and continued to track the submarine with MSDF vessels until it entered the high seas.

¹⁰ The term "territorial waters" also includes inland waters.

VOICE

Voice of Early Warning Aircraft Crew in Charge of Conducting Surveillance Operations

**Lieutenant Colonel TAMAKOSHI Akira, Commander,
601st Squadron, Airborne Warning and Control Wing,
ASDF (Misawa City, Aomori Prefecture)**

Our squadron was established in November 1983 to operate the E-2C early warning aircraft, which conduct airborne ISR to supplement ground-based radar coverage, after the defection in September 1976 by a Mig-25 fighter aircraft piloted by Lieutenant Belenko from the then Soviet Union. The E-2C, also known as the “flying radar station,” has been operated for nearly 40 years. However, acquisition of E-2D is progressing to strengthen ISR capabilities, and two models, the E-2C and E-2D, are currently in operation. While training the crew (pilots, on-board weapons control personnel, and on-board warning and control personnel), we are always on high alert to swiftly conduct airborne surveillance and intercept control



The author starting an E-2D engine

when an unidentified aircraft appears in the vicinity of Japan.

The appearance of the E-2D is almost the same as the E-2C, but the radar and other systems are remarkably improved, and further capability buildup is to come. It is very fulfilling to work on such new equipment.

Amid the conversion period, we are conducting personnel training and exercises while repeating trial and error on a daily basis. All members of the squadron, including aircraft maintenance personnel and those who maintain and manage the program, cooperate with each other, and we feel joy every time one OR (operational ready) member passes the examination.

Going forward, the squadron will continue to work together as one to maximize the capabilities of the E-2D.

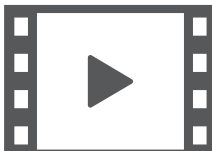


Squadron personnel and the E-2C/D early warning aircrafts

In January 2018, a submerged submarine was spotted by MSDF assets including a destroyer moving through Japanese contiguous zones of the Senkaku Islands. The submarine was then observed surfacing in international waters of the East China Sea flying the Chinese flag. In the past, submerged submarines moving through Japanese contiguous zones were spotted in other sea areas.¹¹ This was the first time that a Chinese naval submarine has been

observed operating in the Japanese contiguous zones of the Senkaku Islands.

Furthermore, in June 2020 it was confirmed that a submarine presumed to be Chinese was navigating through the Japanese contiguous zones in waters around Amami Oshima Island, and necessary information gathering and surveillance operations were carried out by the MSDF, etc.



Video: Scramble
URL: <https://youtu.be/lyi6FNpxiTE>



Video: Video showing the activities of the ASDF (JASDF Air Review 2020 broadcast footage)
URL: <https://youtu.be/8WyUhnL30q0>



¹¹ MSDF P-3C patrol aircraft and others confirmed observations of submerged submarines navigating through the Japanese contiguous zones in waters west of Amami Oshima Island, south of Kumejima Island and south of Minamidaitojima Island in May 2013, in waters east of Miyakojima Island in March 2014, and in waters southeast of Tsushima Island in February 2016. These incidents were made public.

International law does not prohibit foreign submarines from navigating through the contiguous zones in the waters of coastal countries, but Japan maintains a posture to appropriately respond to these types of activities.

3 Response to Armed Special Operations Vessels

(1) Basic Concept

The Japan Coast Guard, as a police organization, is primarily responsible for responding to suspicious armed special operations vessels (unidentified vessels). However, in the event that it is deemed extremely difficult or impossible for the Japan Coast Guard to respond to a situation, an order for maritime security operations will be issued and the situation will be handled by the SDF in cooperation with the Japan Coast Guard.

(2) Response by the MOD/SDF

In light of the lessons learned from the cases of an unidentified vessel off the Noto Peninsula in 1999, an unidentified vessel in the sea southwest of Kyushu in 2001, and other similar incidents, the MOD/SDF have been making various efforts.

In particular, the MSDF has been taking the following steps: (1) deployment of Patrol Guided Missile Boats; (2) establishment of the MSDF Special Boarding Unit;¹² (3) equipment of destroyers with machine guns; (4) furnishing forcible maritime interdiction equipment (flat-nose shells);¹³ (5) improving the sufficiency ratio of military vessel personnel; and (6) enhancing equipment for the Vessel Boarding Inspection Team. In addition, based on “the manual for dealing with suspicious vessels” formulated jointly by the then Defense Agency and the Japan Coast Guard in 1999, they have regularly conducted the training in order to strengthen coordination.

4 Information Gathering Activities for Ensuring the Safety of Japan-related Vessels in the Middle East

1 Background of the Deployment of the SDF to the Middle East

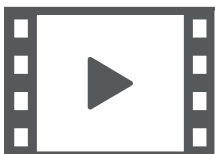
Peace and stability in the Middle East are crucial to the peace and prosperity of the international community, including Japan. In addition, it is very important to ensure the safety of Japan-related vessels in the Middle East, which is the world's major energy source and on which Japan depends for about 90% of its crude oil imports.

In the Middle East, amidst rising tensions, there were incidents of attacks on ships. In June 2019, Japan-related vessels suffered damage. Under these circumstances, the United States, European countries, and other countries are taking steps to ensure the safety of navigation in the region by utilizing ships and aircraft.

In order to ease tensions and stabilize the situation in

the Middle East, the Japanese Government has actively promoted diplomatic initiatives, including Prime Minister Abe's visit to Iran in the same month, and the Japan-U.S. summit meeting during the UN General Assembly and the Japan-Iran summit meeting in September.

In this context, as a result of discussions that took place between the Prime Minister and other relevant ministers at the National Security Council and other meetings, Japan's own initiative to ensure peace and stability in the Middle East and the safety of Japan-related vessels is as follows: (1) further diplomatic efforts to ease tensions in the Middle East and stabilize the situation; (2) thorough implementation of navigation safety measures, including close information sharing with relevant industries; and (3) conduct information gathering activities via the use of SDF assets. In December, the Cabinet approved them as the government's policy for governmental efforts to



Video: Christening and launch ceremony for the destroyer JS “Kumano”
URL: <https://youtu.be/EORBBhqpc8>



Video: Christening and launch ceremony for the submarine JS “Taigei”
URL: https://www.youtube.com/watch?v=_E6N8FDPmCQ



¹² A special unit of the MSDF was newly established in March 2001 to deter expected resistance, and disarm suspicious vessels in the event of vessel boarding inspections under maritime security operations.

¹³ A non-bursting shell launched from the 76-mm gun equipped on a destroyer, the flat front nose of which keeps it from bouncing.

ensure the safety of Japan-related vessels.

For these information gathering activities, in addition to the dispatch of a destroyer as a surface force, two P-3C patrol aircraft of the Deployment Air Force for Counter Piracy Enforcement (DAPE) will be utilized to the extent that it does not interfere with the counter-piracy missions.

The area of operation includes three waters of high seas: the Gulf of Oman, the northern Arabian Sea and the Gulf of Aden to the east of the Bab el-Mandeb Strait (including the exclusive economic zones of the coastal states).

Information gathered by the SDF is shared with the Cabinet Secretariat, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), MOFA, and other relevant ministries and agencies, as well as with relevant industries through public-private liaison meetings, to be used for the government's navigation safety measures.

2 The SDF's Activities

(1) Information gathering activities by the SDF

The SDF's information gathering activities are part of the government's navigation safety measures and are aimed at collecting information necessary to ensure the safety of Japan-related vessels.

The activities are to be conducted in accordance with the provisions of Article 4, paragraph (1), item (xviii) of the Act for Establishment of the Ministry of Defense, as they would need smooth decision making and order issuance in relation to Maritime Security Operations as measures for unforeseen circumstances or other changes in the situation, which are provided in Article 82 of the Self-Defense Forces Law.

(2) Results of the SDF's Activities

In January 2020, two P-3C patrol aircraft left Naha, in line with the rotation of the counter-piracy unit, and information gathering activities began in January.

Additionally, the destroyer JS "Takanami" departed from port in February 2020, and information gathering activities in the sea area at the site started that same month.

So far, the destroyer JS "Kirisame" as the second unit and the destroyer JS "Murasame" as the third unit have been dispatched, and in January 2021, the destroyer JS "Suzunami" took over mission activities as the fourth unit.

To date, no information has been received that there were unusual events for Japan-related vessels in the sea areas where the surface units and aerial units are active.



Destroyer JS "Suzunami" engaging in information gathering activities in the northern part of the Arabian Sea

a. Deployment Surface Force for Information Gathering Activities

Operates in the high seas of the Gulf of Oman and in the high seas of the northern Arabian Sea. The total number of confirmed vessels as of March 31, 2021, is 26,576.

b. Deployment Air Force for Counter Piracy Enforcement

Operates in the high seas of the Gulf of Aden and in the high seas of the western side of the northern Arabian Sea. The total number of confirmed vessels as of March 31, 2021, is 17,798.

(3) Extension of the Activity Period

In the Middle East, although there is no immediate need to protect Japan-related vessels, high tensions persist, and, based on the fact that each country is continuing its own activities, including the "International Maritime Security Construct" by the United States and other countries, on December 11, 2020, the Japanese Government decided to extend the SDF's activity period by one year.

In light of the need to ensure the safety of navigation for Japan-related vessels, if it is deemed before the expiration of the period that activities by the SDF are no longer necessary, then, in addition to concluding activities at that point and without waiting for the end of the activity period, the National Security Council will consider how to respond if there is a significant change in the situation.



Fig. III-1-1-6 (Units Engaged in Information Gathering Activities in the Middle East)

Fig. III-1-1-7 (Information Gathering Activities by the SDF [image])
Reference 15 (Government's Efforts to Ensure the Safety of Japan-Related Vessels in the Middle East)



Video: Information gathering activities necessary to ensure the safety of Japanese vessels in the Middle East

URL: <https://youtu.be/UpYzIKWs9rw>

Fig. III-1-1-6 Units Engaged in Information Gathering Activities in the Middle East

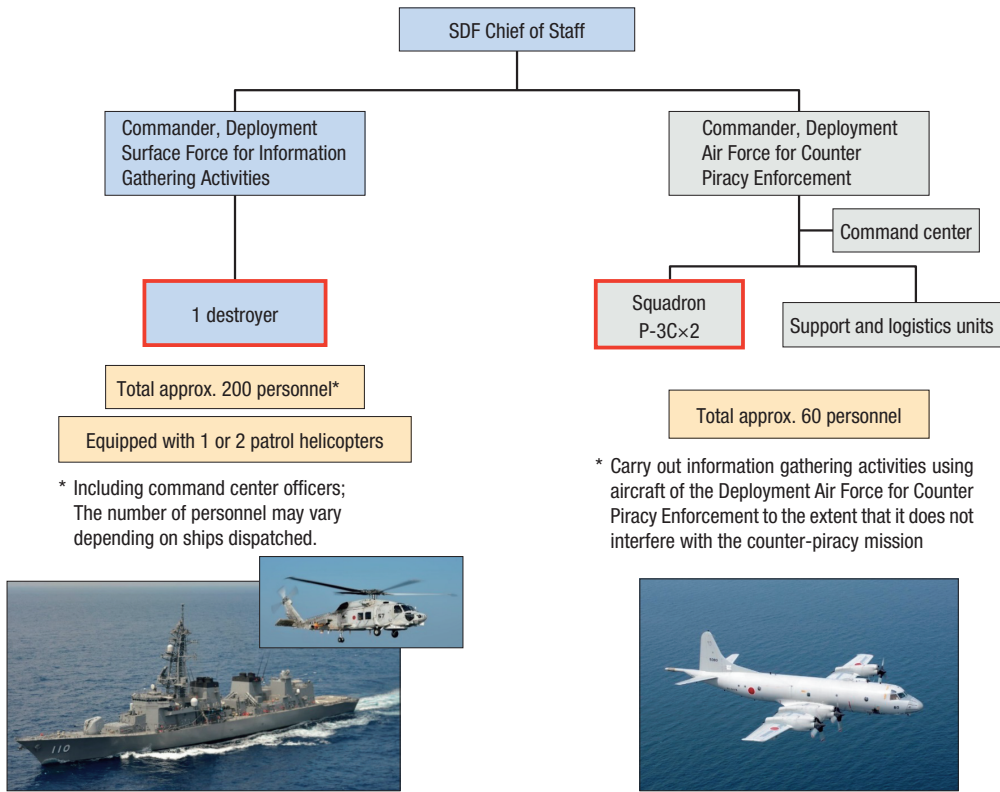


Fig. III-1-1-7 Information Gathering Activities by the SDF (image)

- **Purpose:** Gather information necessary to ensure the safety of Japan-related vessels as part of the government's navigation safety measures
 - * When further action of the SDF is found to be necessary due to unforeseen circumstances or other changes in the situation, maritime security actions will be ordered (vessels to be protected are Japan-related ones (*), and action will be taken depending on the circumstances).
- **Assets used:** 1 destroyer (equipped with 1 or 2 patrol helicopters), 2 patrol aircraft P-3C (using aircraft of the Deployment Air Force for Counter Piracy Enforcement)
 - ⇒ It is possible to continuously gather information on navigation of vessels in the relevant waters, situation of the surrounding waters, and presence of any unusual events.
- **Areas for information gathering activities:** The three high seas of the Gulf of Oman, the northern Arabian Sea and the Gulf of Aden on the eastern side of the Bab el-Mandeb Strait (including the exclusive economic zones (EEZ))

* The figure is for illustrative purposes.

* In addition to Japanese vessels and foreign vessels with Japanese nationals onboard, it also refers to vessels that are important to the stable economic activities of Japanese citizens, including foreign vessels operated by a Japanese ship operator, and foreign vessels transporting Japanese cargo.

3 Communication and Cooperation with Relevant Countries

(1) United States

As a result of a comprehensive review of what measures Japan should take to ensure the safe navigation of Japan-related vessels in the Middle East, Japan has started to implement efforts as Japan's independent initiative without participating in the International Maritime Security Construct led by the United States, considering the need for ensuring a stable supply of crude oil, relations with the United States, and relations with Iran. At the same time, to ensure safe navigation in the Middle East, the SDF has been cooperating closely with the United States in various ways. In the information gathering activities, the SDF will also appropriately cooperate with the United States as an ally, while observing the government's policy of conducting navigation safety measures independently from any other country's initiatives. For this reason, an MSDF officer has been dispatched to the U.S. Central Naval Command in Bahrain as a liaison officer to share information with the U.S. Forces.

(2) Coastal States in the Middle East

It is important to gain the understanding of the coastal states, including Iran, regarding the information gathering activities that Japan is undertaking as an independent initiative, and Japan has been explaining these activities to them with transparency. In addition, the coastal states play an important role in ensuring safe navigation in the Middle East. Japan has been reaching out to the coastal states to gain their understanding of Japan's efforts.

At the Japan-Iran Defense Ministers' Video Teleconference on February 15, 2021, Minister Kishi explained the extension of information gathering activities by the SDF for the purpose of ensuring the safety of navigation of Japan-related vessels in the Middle East, and requested cooperation towards ensuring the safe navigation of vessels, including ensuring the safety of Japan-related vessels and others. Japan intends to continue to communicate with the coastal states, including Iran.

Section 2

Defense of Japan including its Remote Islands

Among the roles that must be served by Japan's defense capability as set forth in the NDPG, the idea of "(2) countering attacks against Japan, including its remote islands" is as follows.

In response to attack on Japan including its remote islands, the SDF will quickly maneuver and deploy requisite units to block access and landing of invading forces while ensuring maritime¹ and air² superiority. Even when maintaining maritime and air superiority becomes untenable, the SDF will block invading forces' access and landing from outside their threat envelopes. Should any part of the territory be occupied, the SDF will retake it by employing all necessary measures.

Against airborne attack by missiles and aircraft, the SDF will respond in a swift and sustained manner

by applying optimal means and minimize damage to maintain SDF's capabilities as well as the infrastructure upon which such capabilities are employed.

In response to attack by guerrillas or special operations forces, the SDF will protect critical facilities including nuclear power plants and search and destroy infiltrating forces.

In responding to such attacks, the SDF will implement cross-domain operations that organically fuse capabilities in space, cyber and electromagnetic domains to block and eliminate attacks.

In view of protecting the life, person and property of the nationals, the SDF will implement measures for civil protection.


1 Defense of Japan's Remote Islands

1 Basic Concept

Japan possesses numerous remote islands. In order to respond to attacks on these islands, it is important to station units and so forth in accordance with the security environment, and also to maneuver and deploy them according to situations on a steady-state basis. It is also important to ensure maritime and air superiority by detecting signs at an early stage through persistent ISR conducted by the SDF.

If signs of attack are detected in advance, units will be maneuvered and deployed in an area expected to be invaded ahead of the deployment of enemy units, and block access and landing of invading forces. Even when maintaining maritime and air superiority becomes untenable, the SDF will block invading forces' access and landing from outside their threat envelopes.

Should any part of the territory be occupied, the SDF will retake it by employing all necessary measures such as bringing the enemy under control by ground fire from aircraft and vessels, and then regaining the territory by the landing of GSDF forces.

 See Fig. III-1-2-1 (Conceptual Image of Defending Japan's Remote Islands)

2 Initiatives of the MOD/SDF

In order to strengthen its defense architecture in the southwestern region, the ASDF established the 9th Air Wing in January 2016 and newly formed the Southwestern Air Defense Force in July 2017. The GSDF, in addition to the Yonaguni coast observation unit formed in March 2016 and other newly-formed units, established the Amphibious Rapid Deployment Brigade with full-fledged amphibious operation capabilities in March 2018. Moreover, the GSDF deployed some units, including an area security unit in Amami Oshima, and an area security unit in Miyakojima Island, in March 2019. A surface-to-air missile unit and a surface-to-ship guided missile unit were deployed to Miyakojima Island in March 2020. The GSDF will deploy an area security unit in charge of the initial response and other units also in Ishigaki Island.

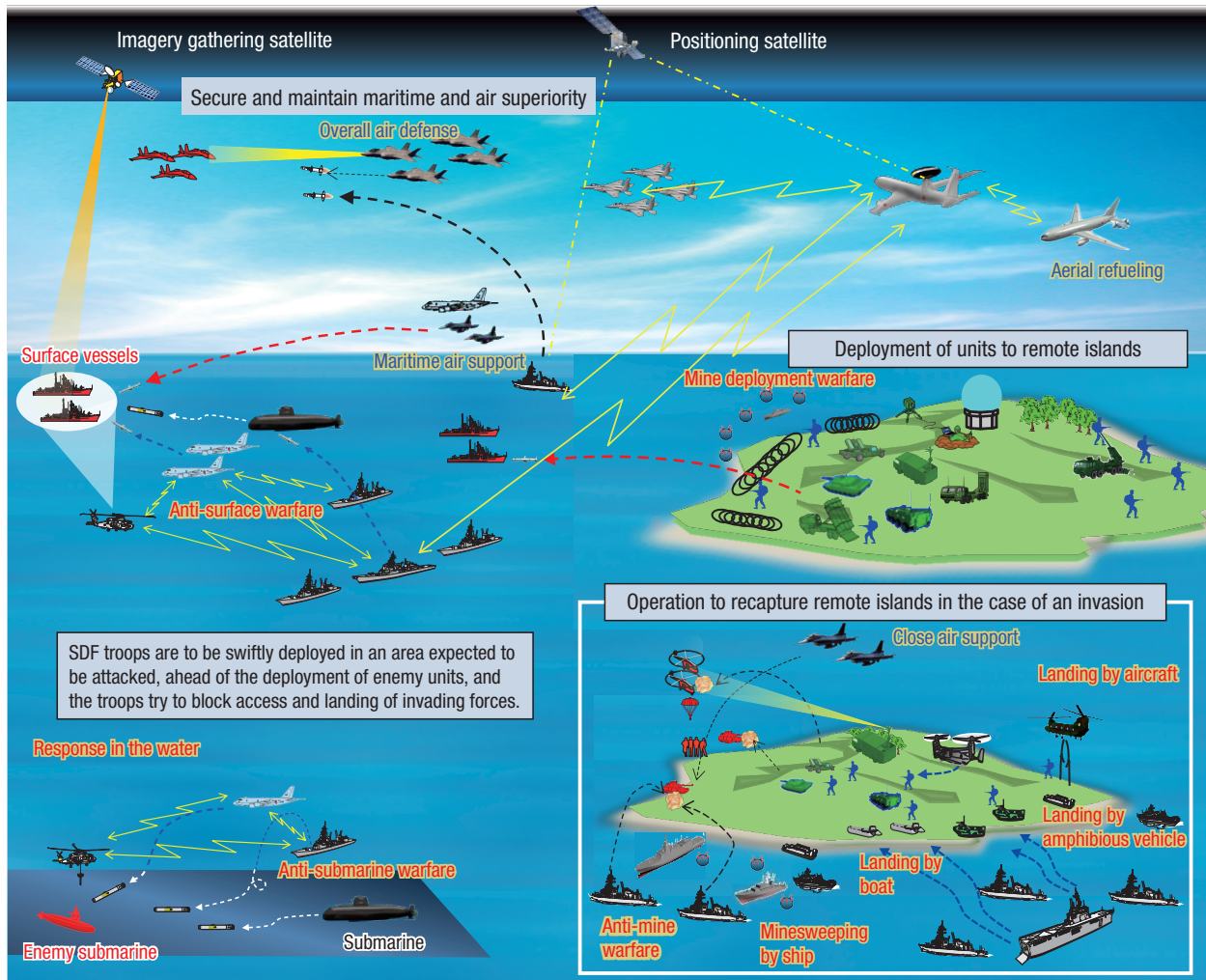
As part of measures to enhance the persistent ISR posture, etc., the SDF has acquired a new type of destroyer (FFM) and E-2D airborne early warning aircraft. The ASDF established the Airborne Warning and Control Wing by upgrading the Airborne Early Warning Group in March 2020 and established the Temporary Reconnaissance Group in March 2021.

In order to deal with ships and landing forces attempting to invade Japan while ensuring the safety of SDF personnel, the SDF procured stand-off missiles

¹ Maritime superiority refers to the condition in which one side has a tactical advantage over the opposing force at sea and can carry out maritime operations without suffering substantial damages by the opposing force.

² Air superiority refers to the condition in which one side can carry out airborne operations without suffering a significant level of obstruction by the opposing force.

Fig. III-1-2-1 Conceptual Image of Defending Japan's Remote Islands



which are capable of responding from the outside of their threat envelopes, and has started research and development (R&D) on technologies required for new anti-ship missiles and Hyper Velocity Gliding Projectiles (HVGP) for the defense of remote islands to take all initiatives necessary to defend the islands since 2018, and technologies required for hypersonic weapons since 2019.

In December 2020, in addition to the aforementioned research and development, the Cabinet approved development of improved Type-12 surface-to-ship guided missile capabilities with the assumption that they will be operated from a variety of platforms.

Also, in order to secure capabilities for swift and largescale transportation and deployment of units, initiatives are underway to enhance rapid deployment capabilities through: the improvement of Osumi class LST (Landing Ship, Tank); and the introduction of V-22 Ospreys and C-2 transport aircraft. In particular, for the operation of V-22 Ospreys, the MOD determined that the KYUSHU-SAGA

International AIRPORT was the best airfield to be used as their deployment site due to positional relationships with the amphibious deployment brigade and relevant units in joint operations, the length of the runway, and potential use as relocation destination of JGSDF Camp Metabaru. In August 2018, the Governor of Saga Prefecture expressed their acceptance. The MOD/SDF will continue to work to gain understanding on deployment at the airport from the relevant local authorities and others.³ Meanwhile, in May 2019, the MOD explained their intention to temporarily deploy V-22 Ospreys at Camp Kisarazu of the GSDF, since there is the prospect that the deployment at KYUSHU-SAGA International AIRPORT will take a certain period of time. In response to the statement of Kisarazu Mayor to cooperate with the provisional deployment plan made in December of the same year, the MOD established a Tactical Airlift Wing that operates V-22 Osprey in March 2020. Additionally, in July 2020, provisional deployment began along with the transport of two V-22 Ospreys to Camp Kisarazu.

³ At the KYUSHU-SAGA International AIRPORT, the ramp, aircraft hangars, etc., are to be developed on the west side of the airport. Approximately 70 aircraft, consisting of 17 newly acquired V-22 Ospreys and approximately 50 helicopters transferred from GSDF Camp Metabaru are expected to be deployed.

Column

Strengthening Standoff Defense Capabilities

As the performance of radars and various types of missiles in countries around the world continue to improve, there is a need to ensure the safety of SDF personnel and effectively prevent attacks on our country. For this reason, the MOD is working to strengthen Japan's standoff defense capabilities (see note) to act against invading naval vessels from remote locations outside of threat zones.

Specifically, it is working on the introduction of stand-off missiles such as the JSM for use on the F-35A fighter, and on research and development of high-speed gliding bombs for

island defense. In order to swiftly enhance Japanese stand-off defense capabilities, in December 2020 the cabinet approved the development of a Type 12 surface-to-ship guided missile with enhanced capabilities, which is designed to operate from a variety of platforms such as vehicles, naval vessels, and aircraft. It is believed that the ability to operate a variety of standoff missiles in this way will make it more difficult for opposing forces to respond and will increase our deterrent capability against attacks on Japan.

Note: Standoff generally means away from.

Column

New Types of Destroyer (FFM) and Submarines

New Type of Destroyer "Mogami" Launched

In order to handle an increasing number of missions, the MOD/SDF is taking steps to establish a fleet of 54 destroyers, as stipulated in the National Defense Program Guidelines (NDPG). Of the 54 vessels, 22 will be new FFM destroyers with improved multi-mission capabilities such as the disposal of underwater mines, which has conventionally been handled by minesweeping units, as well as steady-state surveillance, and various forms of combat during contingencies. The "Mogami" destroyer, launched in March 2021, is the first of the new FFM destroyers.

Compared to a standard destroyer, which has approximately 200 crew members, an FFM destroyer is expected to have approximately 90 crew members, due to its compact size and other factors. Furthermore, the use of multiple crews working in shifts is expected to increase the number of operation days.

The MOD/SDF will continue to take steps to establish a fleet of 54 destroyers, including preparations for the commissioning of the recently launched "Mogami" destroyer.



Launching ceremony for the new type of destroyer "Mogami"

New Type of Submarine "Taigei" Launched

The "Taigei" submarine, launched in October 2020, is a new type of submarine with enhanced detection and anti-detection capabilities compared to the existing "Soryu" type. It is equipped with a new type of sonar system capable of enhanced detection compared to conventional systems. Furthermore, the adoption of a "floating floor structure," whereby the floorboards are detached from the hull, enables the absorption of vibrations inside the submarine and a reduction in the amount of noise emitted from it, as well as resistance against external shocks and the protection of the crew and equipment onboard. One of the features of this submarine is a propulsion system that uses lithium-ion batteries, with shortened recharge time through its snorkel, a feature unique to diesel submarines.

The reinforcement of submarine units is essential for conducting underwater Intelligence, Surveillance, and Reconnaissance (ISR), and engaging in defense in the waters around Japan effectively. The MOD/SDF is therefore taking steps to establish a fleet of 22 submarines, as stipulated in the NDPG.



Launching ceremony for the new type of submarine "Taigei"

VOICE

Piloting Superbly Stable and Maneuverable Osprey

Captain SATO Tomohiro, Aviation Instructor, Tactical Airlift Group (Kisarazu City, Chiba Prefecture)

It is a great honor for me to be entrusted with the maiden flight of Osprey (V-22) in Japan, about four years after the start of training. The V-22 is easy to control, very stable in flight, and can fly faster and farther than conventional helicopters, so I am convinced that it is an indispensable piece of equipment

for Japan, which has many remote islands and vast territories. In addition, the V-22 airframe is equipped with a variety of sensors that monitor the conditions of the aircraft in detail, and it has the latest functions that allow it to constantly monitor the situation and fly safely. I will continue to pay attention to aviation safety and contribute to Japan's national defense.



The author starting a V-22 engine



The author (right) with a U.S. Forces instructor providing instruction on V-22 piloting methods




Personnel who landed on Gajajima Island for amphibious operations training



Osprey that has started flying



Meanwhile, various types of training to enhance the capability for amphibious operations are being undertaken. The SDF endeavored to increase its capability through Japan-U.S. Bilateral Joint Exercises (field exercise) from October to November 2020, in

addition to joint amphibious operations training, and by conducting field training with the U.S. Marines Corps in Japan from January to February 2021.

 Fig. III-1-2-2 (Establishment Status of Major Units in Kyushu/Southwestern Region [since 2016] [conceptual diagram])



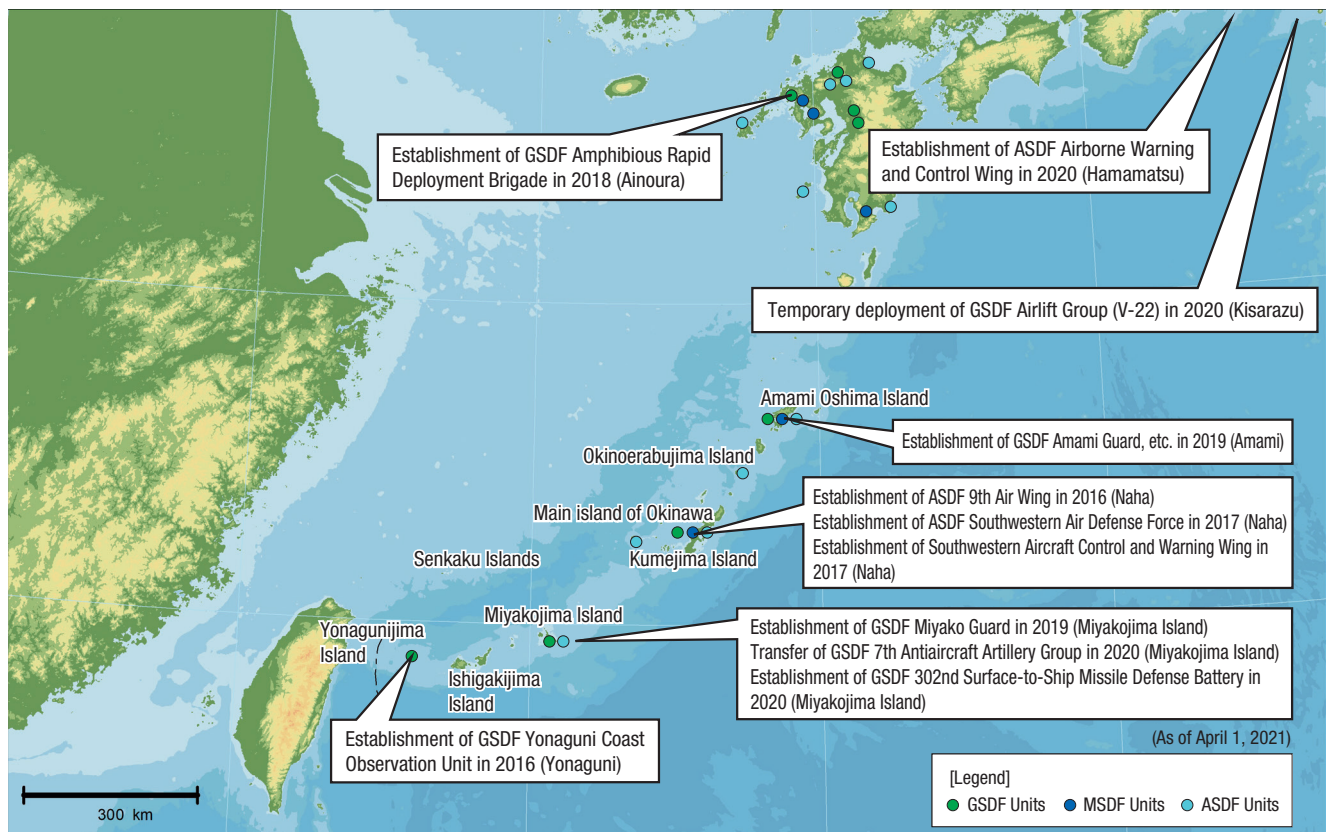

Video: Aerial refueling from airplane
URL: <https://www.youtube.com/watch?v=GaqmOkoWot8>

Video: Temporarily deployed Ospreys flying at Camp Kisarazu
URL: <https://fb.watch/4yZprJtTQG/>

Fig. III-1-2-2

Establishment Status of Major Units in Kyushu/Southwestern Region (since 2016) (conceptual diagram)



2 Response to Missile Attacks

1 Japan's Comprehensive Air and Missile Defense Capability

(1) Basic Concept

Japan began developing the Ballistic Missile Defense (BMD) system in 2004 to be fully prepared for the response against ballistic missile attacks. Necessary amendments were subsequently made to the SDF Law in July 2005, and in December of the same year, the then Security Council and Cabinet decided to begin Japan-U.S. cooperative development of an advanced ballistic missile interceptor. To date, Japan has steadily built up its own defense system against ballistic missile attacks, by such means as installing ballistic missile defense capability to the Aegis-equipped destroyers and deploying the Patriot Advanced Capability-3 (PAC-3).⁴

Currently, Japan's BMD is an effective multi-layered defense system with the upper tier interception by Aegis equipped destroyers and the lower tier by Patriot PAC-3, both interconnected and coordinated by the Japan

Aerospace Defense Ground Environment (JADGE).⁵ In December 2020, the Cabinet approved the replacement of the land-based Aegis system with two vessels equipped with the Aegis system.

Today airborne threats to Japan are increasingly complex and diverse, including ballistic missiles equipped with multiple/maneuverable warheads, high-speed and longer-range cruise missiles, and stealth and multi-role aircraft. In order to effectively and efficiently counter these airborne threats by optimum means and minimize damage, it is necessary to establish a structure to conduct integrated operation of various equipment for missile defense and air defense equipment that each SDF service has separately used, thereby providing nation-wide protection and also enhancing the comprehensive air and missile defense capability that can simultaneously deal with multiple, complex airborne threats. In this regard, the SDF will strive to standardize and streamline the means for interception that each SDF service possesses, including their maintenance and supply systems.

⁴ The Patriot PAC-3 system is one of the air defense systems for countering airborne threats. Unlike the conventional type of anti-aircraft PAC-2 missiles, which mainly intercepts aircraft and other targets, the PAC-3 missiles are designed primarily to intercept ballistic missiles.

⁵ JADGE is a core system for the command and control as well as communication functions. It centrally processes the information regarding aircraft captured by radars installed nationwide, and it provides fighters instructions required for scrambling against aircraft intruding into Japanese territorial airspace and air defense combat operations. In addition, it controls Patriot and radar, etc., in responses to ballistic missiles.

Fig. III-1-2-3 Comprehensive Air and Missile Defense (image)

- Establish a structure with which to conduct integrated operation of various equipment pieces for air defense of each SDF service, not limited to those for missile defense
- Ascertain the status of operations in common by linking to JADGE* via a network
- Simultaneously deal with multiple, complex airborne threats under unified command and control (allocation and direction of optimal means for interception, etc.) through JADGE



*JADGE (Japan Aerospace Defense Ground Environment) is a core system for the command and control as well as communication functions. It centrally processes the information regarding aircraft captured by radars installed nationwide, and it provides fighters with instructions required for scrambling against aircraft intruding into Japanese territorial airspace and air defense combat operations. In addition, it controls Patriot and radar, etc. in response to ballistic missiles.

In case ballistic missiles or other objects are launched against Japan as an armed attack, it will be dealt with by issuing a defense operation order for armed attack situations. On the other hand, when such a situation is not yet acknowledged as an armed attack, Japan will take measures to destroy the ballistic missiles.

As a response against ballistic missiles or other objects, the Joint Task Force-BMD is formed, with the Commander of the Air Defense Command serving as its Commander, and various postures for effective defense are to be taken under a unified command through JADGE. Furthermore, the GSDF will play a leading role in dealing with damage caused by the impact of a fallen ballistic missile.

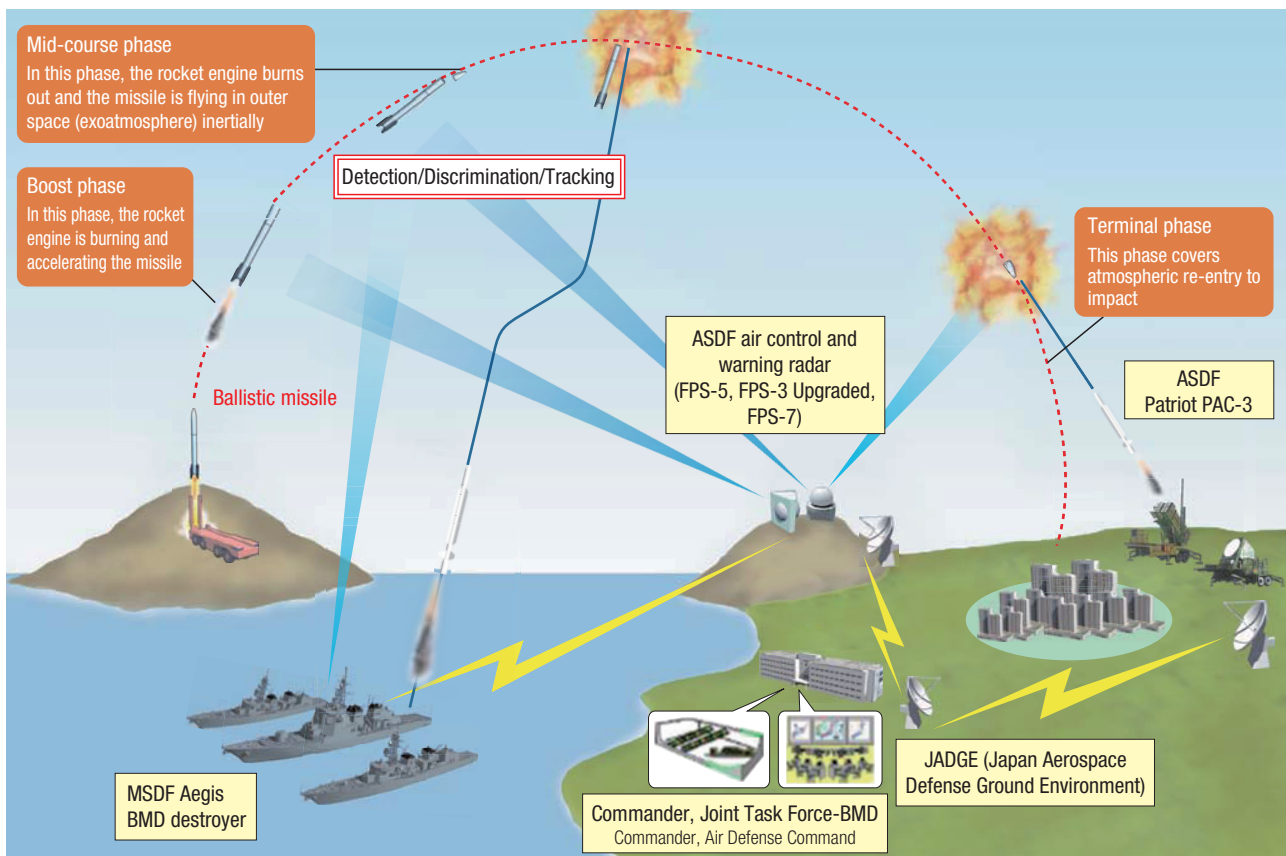
From the perspective of deterring ballistic missile attacks, etc., and preventing damage from those attacks, the MOD will continue to actively participate in examinations held by the Cabinet Secretariat in particular on the development of evacuation facilities equipped with the necessary functions to protect the lives and bodies of citizens from armed attacks or disasters from ballistic missiles, etc.



Aegis ship "Kirishima" launching an SM-3

See Fig. III-1-2-3 (Comprehensive Air and Missile Defense [image]) Fig. III-1-2-4 (Build-up and Operational Concept of BMD [image]) Part II, Chapter 5, 3-4 (Destruction Measures against Ballistic Missiles or Other Objects), p. 238 Reference 11 (History of Efforts for BMD Development in Japan)

Fig. III-1-2-4 Build-up and Operational Concept of BMD (image)



(2) Response by the MOD/SDF

Since 2016, North Korea has conducted three nuclear tests and launched more than 70 ballistic missiles and others. These military actions by North Korea pose grave and imminent threats to Japan's security. North Korea expressed its intention to fully denuclearize the Korean Peninsula at the North Korea-U.S. summit meeting held in June 2018, and disclosed destruction of its nuclear test ground. However, the second North Korea-U.S. summit meeting held in February 2019 ended without any agreement and North Korea has not so far dismantled all its weapons of mass destruction or ballistic missiles in a complete, verifiable and irreversible manner. North Korea is assessed to have already successfully miniaturized nuclear weapons to fit ballistic missile warheads through repeated nuclear tests and ballistic missile launches to date, and it possesses several hundred ballistic missiles capable of reaching Japan.

Some of the missiles that were launched in 2019 are presumed to be new models which can fly at a lower altitude than conventional ballistic missiles; in addition, they appear to be able to fly on an irregular trajectory. It is suggested that the aim is to penetrate missile defense systems. At the 8th Korean Workers' Party (KWP)

Congress held in January 2021, the promotion of multi-warhead technology, "hypersonic glide flight warheads," nuclear-powered submarines, and solid fuel-propelled propulsion ICBM development were mentioned.

The MOD/SDF continues to carefully monitor the concrete actions of North Korea toward the dismantlement of weapons of mass destruction and missiles, and conducts the necessary intelligence, monitoring and surveillance activities, and other necessary activities while closely cooperating with the United States and other countries.

Further cooperation with the U.S. Government including the U.S. Forces in Japan is essential for efficient and effective operation of the BMD system. Thus, related measures including constant real-time sharing of BMD operational and relevant information, and the expansion of BMD cooperation have been agreed upon at the Japan-U.S. Security Consultative Committee (2+2 Meeting).

Furthermore, Japan has closely cooperated with the United States in responding to ballistic missiles, by means such as receiving Shared Early Warning (SEW)⁶ from the U.S. Forces, and sharing intelligence gathered by assets including transportable BMD radar (TPY-2 radar) and Aegis-equipped destroyers deployed in Japan by the U.S. Forces.


⁶ Information on the area and time of launch, the projected area and time, where and when objects fall relating to ballistic missiles launched in the direction of Japan, which is analyzed and conveyed to the SDF by the U.S. Forces in a short period of time after the launch (The SDF started to receive the information in April 1996).

Maintenance, enhancement and validation of Japan-U.S. bilateral response capabilities have been actively conducted through training and other activities. Since 2010, BMD special exercises have been held between the MSDF and the U.S. Navy, connecting their ships and other equipment via a network to conduct simulated ballistic missile response activities. The ASDF participated in 2018, and the GSDF in 2019 in this exercise. The exercise is conducted as an integrated air and missile defense exercise aimed to improve tactical skills and strengthen cooperation.

In addition to Japan-U.S. cooperation, it is significant to bolster the cooperation between Japan, the United States and the Republic of Korea. In January, March, October and December 2017, trilateral ballistic missile information sharing exercises were held in sea areas surrounding Japan with the objective of strengthening coordination.

Sensitive information related to ballistic missiles, etc., is adequately shared with relevant countries, including the United States through a secured infrastructure and framework⁷ to protect secrets.

The SDF conducts various training in peacetime to improve its capability to counter ballistic missiles. It has been conducting PAC-3 maneuver deployment training from June 2017 in an effort to strengthen the SDF's capability to counter ballistic missiles and generate a sense of safety and security among the public. It has conducted 29 training sessions as of the end of March 2021 including deployments to public facilities.

 See Part I, Chapter 2, Section 4-1 (North Korea), p. 97
Part I, Chapter 2, Section 4-2-3 (Military Posture of the ROK), p. 114

(3) Initiatives towards Strengthening of the BMD System

Currently the SDF maneuvers and deploys, according to situation, Aegis-equipped destroyers for defense of the entire territory of Japan and PAC-3, which is deployed



across the country for the defense of stationing locations. On that premise, the SDF has worked to increase the number of Aegis BMD destroyers. So far, the MOD has completed refurbishment of two without BMD capabilities, “Atago” and “Ashigara,” to give them BMD capabilities by December 2018. The MOD also constructed two additional Aegis-equipped destroyers with BMD capabilities (“Maya” and “Haguro”) using the FY2015 and FY2016 budgets. These projects increased the number of Aegis-equipped destroyers with BMD capabilities from the existing six to eight in FY2020.

Meanwhile, Japan and the United States are jointly developing advanced interceptor missiles for BMD (SM-3 Block IIA), which will be the successor to SM-3 Block IA to be mounted on Aegis-equipped destroyers, and promoting the project to its deployment, in order to deal with future threats posed by increasingly advanced and diverse ballistic missile attacks. At the National Security Council 9-Minister Meeting in December 2016, a decision was made to transition to joint production and the deployment phase. Since the FY2017 budget, SM-3 Block IIA acquisitions are ongoing.

Acquisition and deployment of SM-3 Block IIA are planned to be implemented in FY2021. In comparison with the previous SM-3 Block IA, SM-3 Block IIA have not only extended interceptable altitude and coverage of protection, but also have enhanced defeating capability and simultaneous engagement capability.

In addition, the interception capabilities of SM-3 Block IIA have been enhanced against ballistic missiles equipped with interception avoidance measures such as a decoy and ballistic missiles launched with an intention to avoid being intercepted by taking a higher than nominal trajectory (lofted trajectory).⁸

With regard to Patriot PAC-3, the MOD has been working for procurement of the enhanced capability type, PAC-3MSE (Missile Segment Enhancement) and

Video: Training on maneuver and deployment of PAC-3
URL: <https://www.youtube.com/watch?v=aJ2PQPozQL8>

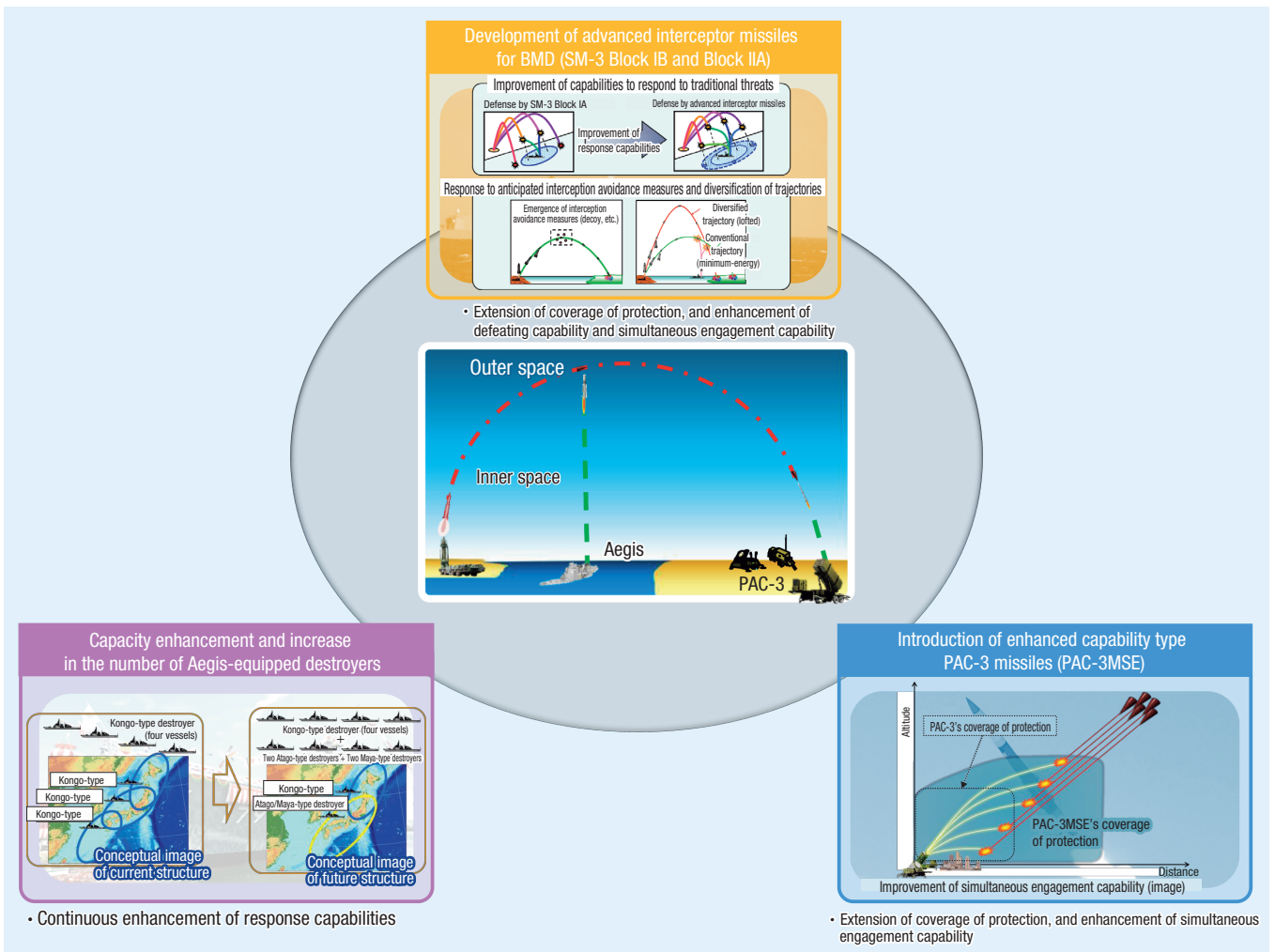


Video: SM-3 Block 1B launch test aboard the Atago destroyer
URL: <https://youtu.be/abYjRboZnc0>



⁷ The enforcement of the Act on the Protection of Specially Designated Secrets in December 2014 (Act No. 108 of 2013) has established the basis for protection of highly confidential information related to national security. In addition, the Agreement between the Government of Japan and the Government of the Republic of Korea on the Protection of Classified Military Information (the Japan-ROK General Security of Military Information Agreement (GSOMIA)) entered into effect on November 2016. GSOMIA serves as a framework for protecting various classified information, including information regarding North Korea's nuclear and missile threat, shared between Japan and the ROK, which is required for practical and effective responses to various situations.

⁸ By taking a higher trajectory than minimum energy trajectories (trajectories that enable efficient flying of a missile and maximize its range), it takes a shorter range than the maximum range, but the falling speed of the missile becomes faster.



started its deployment at the end of FY2019. Introduction of PAC-3MSE will realize the extension of interception altitude from less than 20 km to tens of km, meaning that the coverage of protection (area) will expand more than twice compared with the current PAC-3.

In this way Japan is taking measures necessary to strengthen its protection structure and plans to continue the efforts.⁹

See Fig. III-1-2-5 (Major Efforts to Improve Ballistic Missile Response Capabilities)

(4) Introduction of Aegis Ashore and Suspension of the Deployment Process

As North Korea's nuclear weapons and missiles pose grave and imminent threats to Japan's security, Japan needs to work to drastically upgrade its ballistic missile defense capabilities in order to ensure constant and sustained protection from peacetime. At meetings of the National Security Council and Cabinet in December 2017, a decision was made based on the following ideas to introduce two Aegis Ashore units, to be retained by the GSDF.

- The introduction of two units of Aegis Ashore would enable seamless defense of the entire territory of Japan 24 hours a day and 365 days a year, and the burden on personnel is anticipated to be lifted significantly.
- Under the system of eight Aegis-equipped destroyers, about two of them had to focus on BMD mission only in the sea in order to protect the entire territory of Japan. Once two Aegis Ashore units are deployed, however, Aegis-equipped destroyers can be used for missions ensuring maritime security, conducting training to maintain these skills, and ensuring sufficient rotation of crewmembers, which will be connected to further strengthen Japan's deterrence capability as a whole.
- The radar mounted on Aegis Ashore is high-performance, state-of-the-art SPY-7, and, compared to the MSDF's Aegis-equipped destroyers, SPY-7 has the ability to respond to lofted orbits and the ability to respond to multiple simultaneous attacks, and dramatically improves Japan's ballistic missile defense capability, such as the ability to respond to lofted orbits and the ability to respond to multiple simultaneous attacks.

⁹ The FY2021 budget includes expenses necessary for the acquisition of PAC-3MSE missiles, which are capable of responding to both ballistic missiles/cruise missiles and aircraft.

In June 2018, the MOD announced that the GSDF Araya Maneuver Area in Akita Prefecture and Mutsumi Maneuver Area in Yamaguchi Prefecture were candidate sites for the deployment of two units of Aegis Ashore, but in June 2020 the MOD decided to suspend the process related to the deployment of Aegis Ashore.¹⁰

(5) Development of a New Missile Defense System

Regarding alternatives to Aegis Ashore, the U.S. government and Japanese and U.S. private-sector businesses worked together from September 2020 to consider the technical feasibility of mounting Aegis Ashore components on a mobile offshore platform. They subsequently confirmed that this was indeed technically possible.

After careful deliberation, the Cabinet approved the development of two Aegis system-equipped vessels instead of the land-based Aegis system (Aegis Ashore) in December 2020, as part of measures to be taken to respond more flexibly and effectively to the increasingly severe security environment surrounding Japan.

The ships will be maintained by the MSDF, and their details, including functions to be added to the ships and design plans, will continue to be examined and necessary measures will be taken.

In the Cabinet's decision, the government is to continue to consider strengthening deterrence capacity.

2 Missile Defense of the United States and Japan-U.S. BMD Technical Cooperation

(1) Missile Defense of the United States

The United States is developing a multi-tier missile defense system that combines defense systems suited for each of the following phases of the ballistic missile flight path to provide a mutually complementary response: (1) the boost phase, (2) the mid-course phase, and (3) the terminal phase. Japan and the United States have developed close coordination concerning ballistic missile defense, and a part of the missile defense system of the United States has been deployed in our country in a step-by-step manner.¹¹

(2) Japan-U.S. BMD Technology Cooperation, etc.

The government commenced a Japan-U.S. cooperative research project on a sea-based upper-tier system in FY1999. As the result showed good prospects for resolving initial technical challenges, in December 2005, the then Security Council and the Cabinet decided to start Japan-U.S. cooperative development of an advanced ballistic missile interceptor by using the results of the project as a technical basis.¹² The joint development started in June 2006 with a view to expanding the coverage of protection and dealing with future threats posed by increasingly advanced and diverse ballistic missiles attacks.

In February and June 2017, Japan and the United States conducted tests of the SM-3 Block IIA interceptor in waters off Hawaii. Analysis of the test data confirmed that it meets all performance requirements.

In November 2020, the U.S. conducted a sea launch test of SM-3 Block IIA off the coast of Hawaii and, based on information from a satellite system, succeeded in intercepting an ICBM-like missile launched from an experiment facility in the Marshall Islands.

¹⁰ With regards to the effect caused by the booster dropping, since August 2018, the MOD explained to the local communities based on the discussion with the U.S. side up to that time that it would take firm steps to implement measures to control fly-out trajectories of the interceptor (SM-3), to make sure its booster would fall within the Mutsumi Maneuver Area. Meanwhile for Akita Prefecture, since August of the same year, the MOD explained to the local communities that the booster would fall into the sea in the case of the Araya Maneuver Area.

However, it was found out in late May 2020 that not only the software but also the entire system including hardware needed to be refurbished in order to control fly-out trajectories of SM-3 to safely drop its booster within the Mutsumi maneuver area or into the sea in the case of coastal area such as Araya Maneuver Area, which would require a considerable amount of cost and time.

The MOD concluded that it was not reasonable to invest additional cost and time, and that it became unable to deliver on commitments to the local people. For that reason, the MOD announced the decision to suspend the process of the deployment of Aegis Ashore.

¹¹ Specifically, a TPY-2 radar (so-called X-band radar) for BMD has been deployed at the U.S. Shariki Communication Site in 2006. In October 2006, Patriot PAC-3 units were deployed in Okinawa Prefecture, and in October 2007, a Joint Tactical Ground Station (JTAGS) was deployed in Aomori Prefecture. Furthermore, the 2nd TPY-2 radar was deployed at the U.S. Kyogamisaki Communication Site in December 2014. In October 2018, the 38th Air Defense Artillery Brigade Headquarters was deployed in Sagami-hara. In addition, BMD-capable Aegis ships of the U.S. Forces were deployed at Commander Fleet Activities, Yokosuka (Yokosuka City, Kanagawa Prefecture) in October 2015, March 2016 and May 2018.

¹² With regard to the Japan-U.S. cooperative development, it is necessary to export BMD related arms from Japan to the United States. In accordance with the Chief Cabinet Secretary's statement issued in December 2004, it was determined that the Three Principles on Arms Exports would not apply to the BMD system and related matters under the condition that strict controls are maintained. Based on these circumstances, it was decided that the prior consent of Japan could be given to the third party transfer of the SM-3 Block IIA under certain conditions. This decision was formally announced in the Joint Statement of the Japan-U.S. Security Consultative Committee (2+2 Meeting) in June 2011. The Three Principles on Transfer of Defense Equipment and Technology (Three Principles) received Cabinet approval in April 2014. However, with regard to exceptional measures instigated before the Three Principles were decided, overseas transfers will continue to be organized in the guidelines for the principles as allowable under the Three Principles.

3 Response to Attacks by Guerillas, Special Operations Forces and Others

In Japan, where most of the towns and cities are highly urbanized, even small-scale infiltrations and attacks can pose a serious threat against the country's peace and security. These cases refer to various mode and forms including illegal activities by infiltrated foreign armed agents,¹³ etc., and sabotage carried out by foreign guerillas or special forces, which can be deemed as an armed attack against Japan.

1 Basic Concept

In the stage where the actual situation of intruders and the details of the ongoing case are not clear, the police primarily respond to the situation, while the MOD/SDF will collect relevant information and reinforce the security of the SDF facilities. When the situation is clearer and can be dealt with by the general police force, various forms of assistance such as transportation of police officers and provision of equipment to the police force will be carried out. If the case cannot be dealt with by the general police force, then public security operations by the SDF will be implemented. Furthermore, if it has been confirmed that an armed attack is being carried out against Japan, the SDF will respond under a defense operation order.

2 Responses to Attacks by Guerillas and Special Operations Forces

Typical forms of attacks by guerrillas or special forces include the destruction of critical private infrastructure and other facilities, attacks against people, and assassinations of dignitaries.

In dealing with attacks by guerrillas or special forces, the MOD/SDF will respond with a particular emphasis on the establishment of a relevant information gathering posture, monitoring and surveillance to prevent invasions in coastal areas, protection of key facilities, and search and destruction of invading guerrillas or special forces. Efforts will be made for early detection of attacks and indications through monitoring and surveillance, and, as required, the SDF units will be deployed to protect key facilities, such as nuclear power plants, and the necessary posture for protection will be established at an early stage. Based

on this, in the event of an infiltration of our territory by guerrillas or special operations forces, they will be searched for and detected by reconnaissance units, aviation units and others, and combat units will be promptly deployed to besiege and capture or to destroy them.

 See Fig. III-1-2-6 (Example of Operations against the Attacks by Guerillas and Special Forces)

3 Response to Armed Agents

(1) Basic Concept

While the police assume primary responsibility for responding to illegal activities of armed agents, the SDF will respond in accordance with situational developments. When this happens, the SDF cooperates with the police force. Accordingly, with regard to public security operations of the SDF, the Basic Agreement¹⁴ concerning cooperation procedures between the SDF and the police, as well as local agreements between GSDF divisions/brigades and prefectural police forces, have been concluded.¹⁵

 See Part II, Chapter 5, 3-1 (Public Security Operations), p. 238

(2) Initiatives of the MOD/SDF

The GSDF has been conducting field training exercises nationwide with the police of each prefecture, in an effort to strengthen such collaboration by conducting field exercises at nuclear power plants throughout the country since 2012.¹⁶ Furthermore, joint exercises in dealing with



Ishikawa prefectural police officers and GSDF personnel conducting joint training under a public security operations order (December 2020)

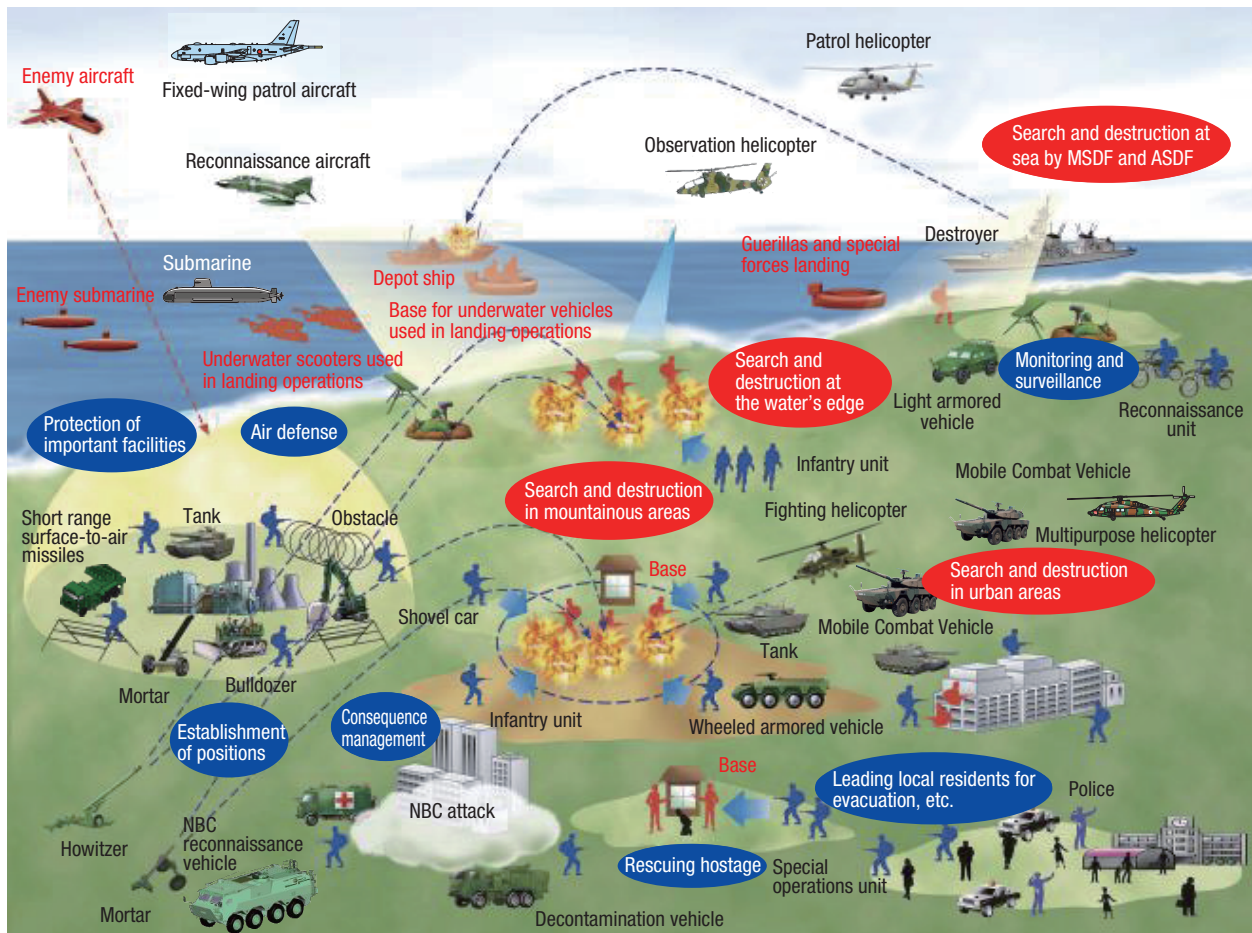
¹³ Refers to persons committing illegal acts such as subversive activities in Japan while possessing weapons with significant wounding and killing power.

¹⁴ The Agreement on the Maintenance of Public Order in the Event of Public Security Operations, which was concluded between the then Defense Agency and the National Public Safety Commission (concluded in 1954 and fully revised in 2000).

¹⁵ In 2004, guidelines were jointly formulated between the National Police Agency and the Defense Agency concerning dealing jointly with public security operations in the event of armed agent incidents.

¹⁶ The GSDF also conducted exercises on the ground at Ikata Nuclear Power Plant (Ehime Prefecture) in 2012, at Tomari Nuclear Power Plant (Hokkaido) and Mihama Nuclear Power Plant (Fukui Prefecture) in 2013, at Shimane Nuclear Power Plant (Shimane Prefecture) in 2014, at Higashidori Nuclear Power Plant (Aomori Prefecture) and Kashiwazaki-Kariwa Nuclear Power Plant (Niigata Prefecture) in 2015, at Takahama Nuclear Power Plant (Fukui Prefecture) in 2016, at Hamaoka Nuclear Power Plant (Shizuoka Prefecture) and Shiga Nuclear Power Plant (Ishikawa Prefecture) in 2017, and at Genkai Nuclear Power Plant (Saga Prefecture) and Ohi Nuclear Power Plant (Fukui Prefecture) in 2019.

Fig. III-1-2-6 Example of Operations against the Attacks by Guerillas and Special Forces



suspicious vessels have also been conducted regularly between the MSDF and the Japan Coast Guard.

1995 is one of the examples of an incident in which these weapons were used.

4 Response to Nuclear, Biological, and Chemical Weapons

In recent years, there has been strong recognition of the danger of NBC (Nuclear, Biological, and Chemical) weapon proliferation, which can cause indiscriminate mass casualties and contamination of an extensive area, and the means for transporting such weapons, as well as related equipment and materials, to terrorists and countries under suspicion of proliferating such weapons. The sarin gas attack¹⁷ on the Tokyo subway in March

(1) Basic Concept
 In the event of the use of NBC weapons in Japan in a way that corresponds to an armed attack, the SDF will conduct defense operations to repel the armed attack and rescue victims. Furthermore, in the event of the use of NBC weapons in a way that does not correspond to an armed attack but against which the general police alone cannot maintain public security, the SDF will conduct public security operations to suppress the armed group and rescue victims in cooperation with related agencies. Furthermore, when the incident does not fall under

Video: Joint exercises with the Japan Coast Guard on dealing with suspicious vessels
URL: <https://youtu.be/-V0Mhd3qxU8>

¹⁷ An incident in which members of the Aum Shinrikyo spread extremely poisonous sarin gas in subway trains crowded with commuters, claiming the lives of 12 people (this number refers to the number of deaths indicated in the judgment rendered to Chizuo Matsumoto (commonly known as Shoko Asahara, a guru of Aum Shinrikyo)). The SDF conducted decontamination operations on the trains and stations as well as supported police forensics.

VOICE

Joint Exercises with the Police Responding to Gray-Zone Situations

Lieutenant Colonel OBAYASHI Hirofumi, Deputy Regiment Commanding Officer, 14th Infantry Regiment, GSDF (Kanazawa City, Ishikawa Prefecture)

On December 11, 2020, the 14th Infantry Regiment conducted a joint drill with the prefectural police of three prefectures in the Hokuriku region (the Toyama, Ishikawa, and Fukui prefectural police) at Camp Kanazawa, co-hosted by the Ishikawa prefectural police.

Joint drills are conducted every year. However, this time, since the drill was held during the COVID-19 crisis, the number of participants was limited unlike the implementation procedures for last year's drill, and efforts were made for procedures to prevent infections such as setting up clinical thermometers and disinfectant.

The regiments in charge of defense and security in the three prefectures of Hokuriku approached this drill with the goal of building face-to-face relationships. In particular, in cases of coordination regarding the protection of nuclear power plants and other facilities, we were able to improve the effectiveness of the protection by embodying the cooperation procedures at the field level with the prefectural police.

In addition, in order to share recognition between the police and the SDF on response procedures of the police and SDF in a variety of scenarios, the police gave specific explanations on the procedures for questioning suspicious persons suspected of possessing weapons and the response procedures based

on legal grounds. In addition, the SDF explained the expected behavior of armed operatives using maps of areas around nuclear power plants, and the SDF's specific response procedures to such situations. Through these exchanges, I believe that we were able to deepen our mutual understanding and relationships of trust on a practical level.

As a member of the regiment, I will continue to contribute to regional safety and security in order to fulfill the responsibilities I have to the people of Japan. For example, through joint drills, disaster drills, and other activities, I hope we will build face-to-face relationships daily with the police of the three Hokuriku prefectures, local governments and designated public institutions in Hokuriku.



Regiment personnel confirm the response procedure for dealing with armed operatives

the category of defense operations or public security operations, the chemical protection units of the GSDF and other units will cooperate with relevant organizations in information gathering concerning the extent of the damage, decontamination activities, transportation of the sick and injured, and medical activities through disaster relief and civil protection dispatches.

(2) Initiatives of the MOD/SDF

The MOD/SDF possesses and maintains the GSDF Central Nuclear Biological Chemical (NBC) Weapon Defense Unit and the Countermeasure Medical Unit as well as increasing the number of chemical and medical protection unit personnel, in order to improve the capability for responding to NBC weapon attacks. Also, the GSDF has designated personnel to take initial action in the event of extraordinary disasters in order to allow operations to begin within approximately one hour.

The MSDF and the ASDF have also acquired protective equipment and materials to be used on vessels and at bases.

4 Readiness against Invasion

The NDPG states that only the necessary level of readiness against land invasions involving the mobilization of large ground forces, which was expected primarily during the Cold War, will be retained.

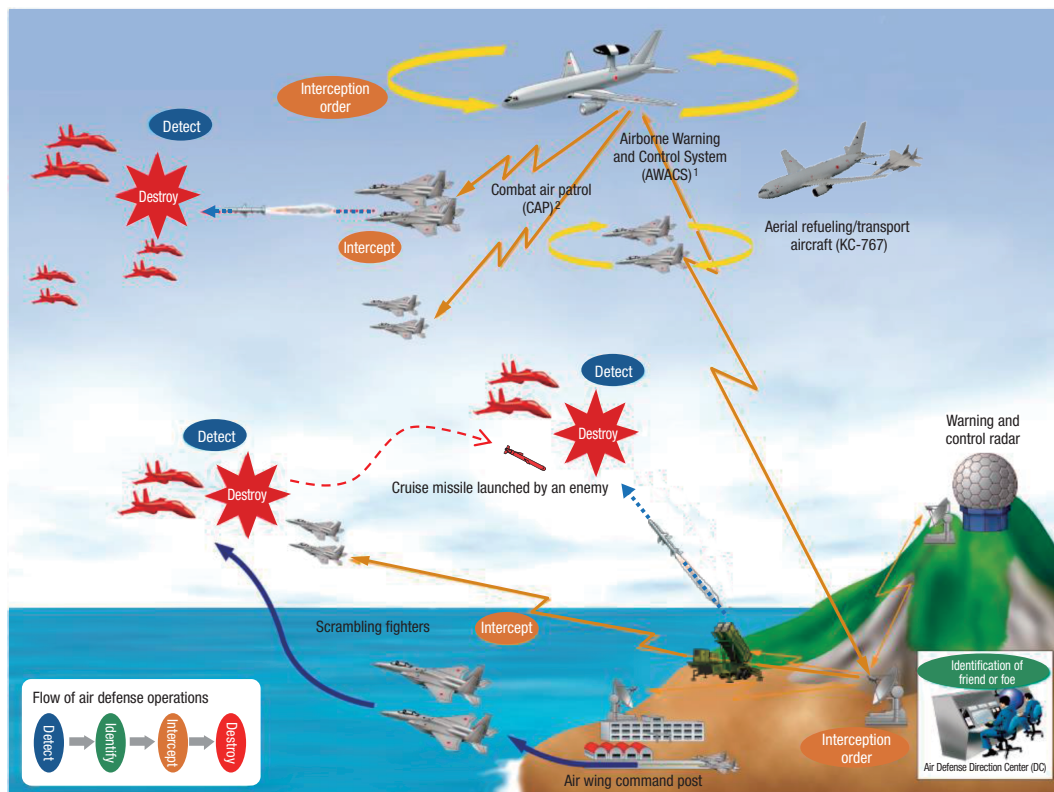
In the event of a military attack on Japan, the SDF will respond with defensive mobilization. Their operations are categorized into (1) operations for aerial air defense operations, (2) defense operations protecting waters around Japan, (3) operations protecting the land, and (4) operations ensuring security in maritime communication, based on the characteristic of their purposes. In executing these operations, the U.S. Forces will assist the operations implemented by the SDF and deploy operations to complement the capabilities of the SDF, including the use of striking power, in line with the Guidelines for Japan-U.S. Defense Cooperation.

1 Air Defense Operations

Based on the geographic features of Japan, in that it is surrounded by the sea, and the features of modern wars,¹⁸ it is expected that at first, a sudden attack against Japan will be exercised by aircraft and missiles, and such aerial attacks are assumed to be conducted repeatedly, in the case where a full-scale invasion against Japan occurs. Operations for aerial defense¹⁹ aim to deal with enemy aerial attacks at the farthest point from our territory, prohibiting enemies from gaining air superiority and preventing harm to the people and the sovereign territory of Japan. At the same time, efforts will be made to inflict significant damage on the enemy thus making the continuation of their aerial attack difficult.

 Fig. III-1-2-7 (Example of Air Defense Operations)

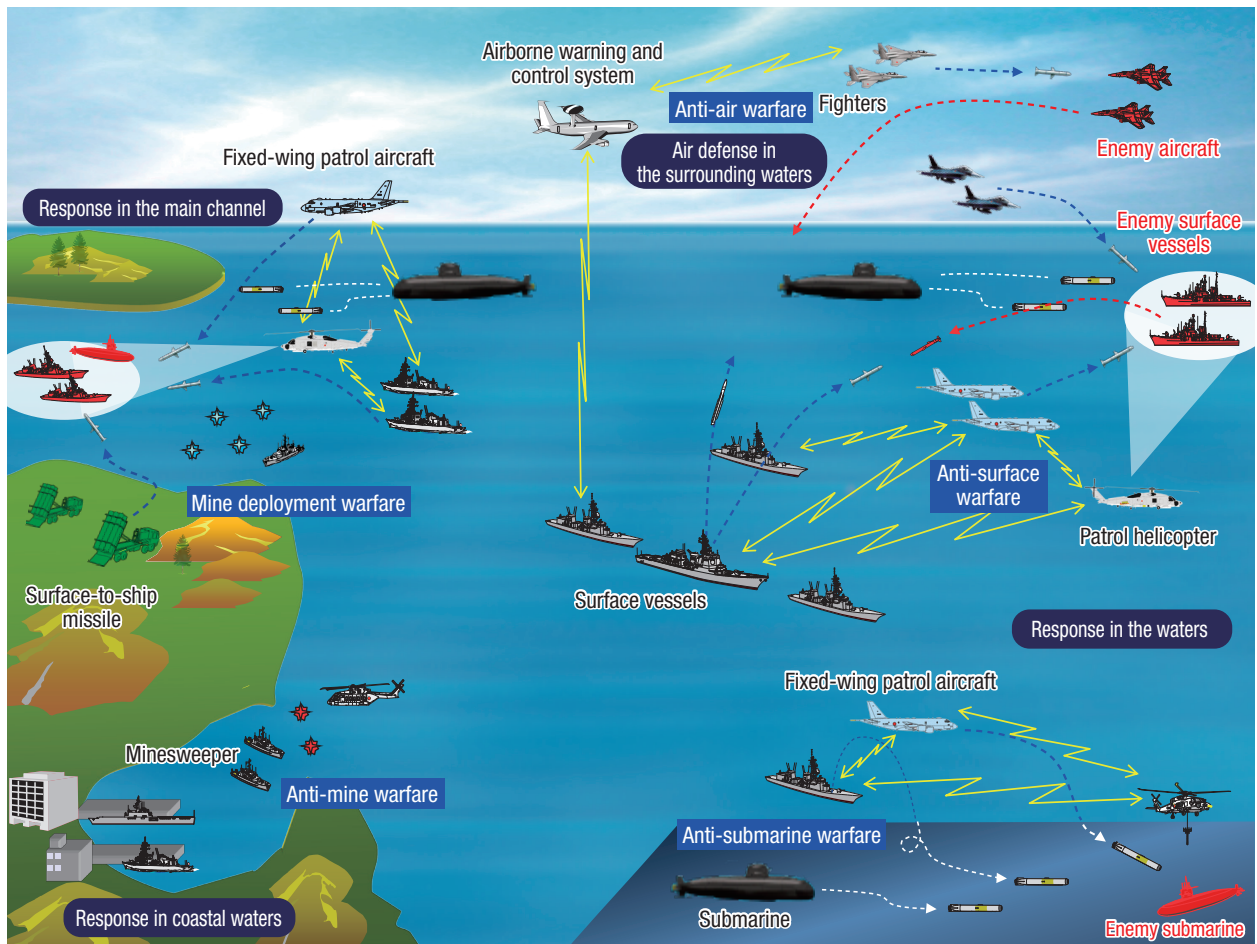
Fig. III-1-2-7 Example of Air Defense Operations



- Notes: 1. Aircraft with airborne warning and control functions in waters distant from its national land and with alternative control capabilities for defense ground environments
- 2. Keeping armed fighters on an airborne alert so that they can immediately respond to approaches by enemy aircraft

¹⁸ Aerial attacks are important elements influencing the results of modern wars. It is vital to obtain air superiority before or at the same time as implementing ground or maritime operations.
¹⁹ A special characteristic of operations for aerial defense is that initial response is critical and can influence the entirety of operations. Thus, Japan needs to maintain its readiness for a quick initial response on an ongoing basis in peacetime, regularly collect information, and rapidly and comprehensively exert combat capabilities from the outset of operations.

Fig. III-1-2-8 Example of the Strategy for Defending Sea Areas Surrounding Japan



2 Defense Operations Protecting Waters Surrounding Japan

If an armed attack is carried out against Japan, which is an island country, aerial attacks are expected to be combined with attacks against our ships and territory by enemy destroyers. In addition, transport vessels could be deployed to enable massive enemy ground forces to invade our territory. Our defense operations protecting the waters surrounding Japan are composed of measures at sea, measures in waters around our coasts, measures in major straits, and aerial defense above waters around Japan. We will protect the waters around our country by combining these multiple operations, blocking the invasion of our enemies, and attacking and depleting their combat capabilities.

See Fig. III-1-2-8 (Example of the Strategy for Defending Sea Areas Surrounding Japan)

3 Operations Protecting the Land

In order to invade the islands of Japan, invading countries are expected to gain sea and air superiority, followed by the landing of ground troops from the sea and airborne troops from the air.

For invading ground and airborne troops, it tends to be difficult to exert systematic combat capabilities while they are moving on their vessels or aircraft or right before or after they land in our territory. As we protect our land, we need to make best use of this weakness to deal with our enemies between coastal and sea areas or at landing points as much as possible and attack them at an early stage.

See Fig. III-1-2-9 (Example of Operations for Coping with the Landing of Invading Forces)

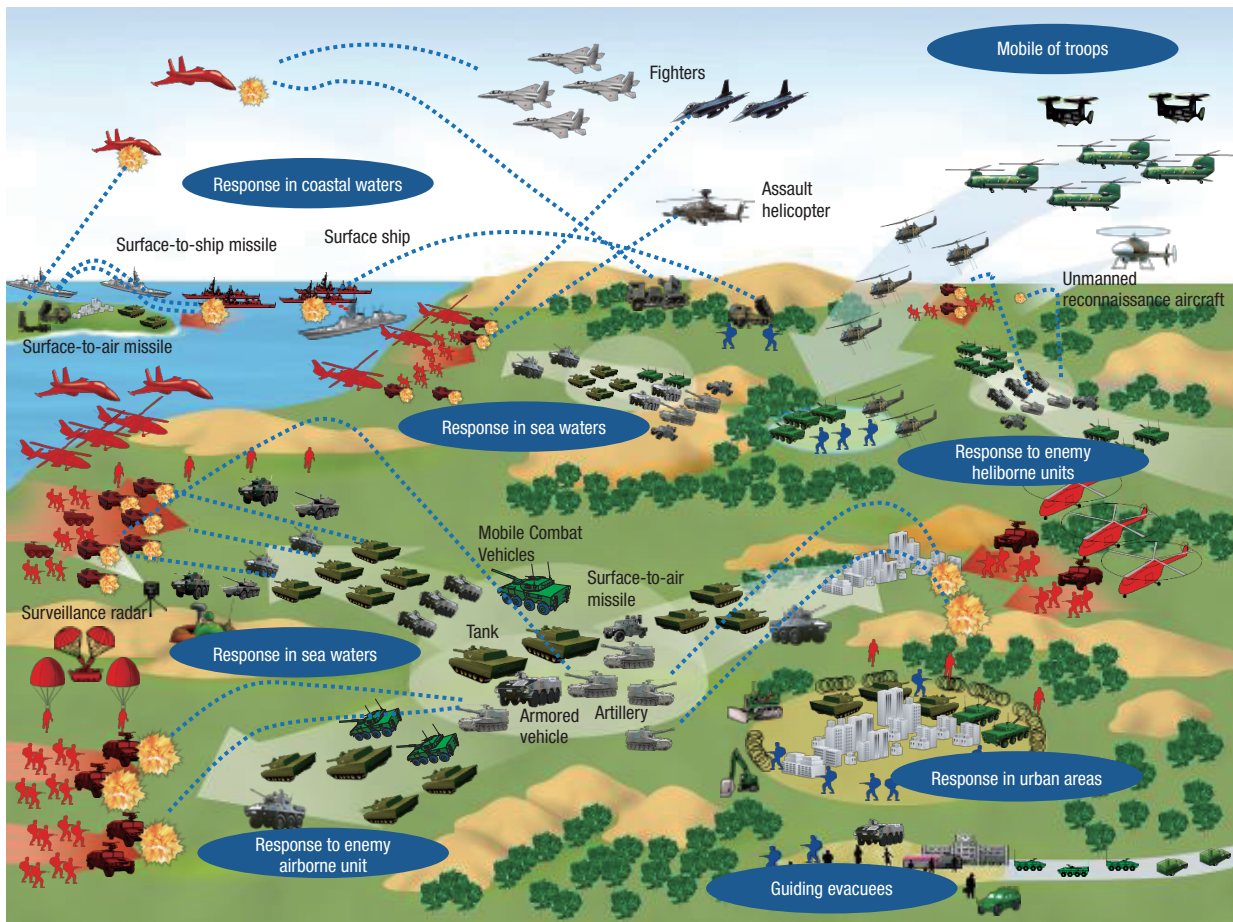
4 Operations Ensuring Security in Maritime Transportation

Japan depends upon other countries for the supply of much of its resources and food, making maritime transportation routes the lifeblood for securing the foundation of our existence and prosperity. Furthermore, if our country comes under armed attack, etc., maritime transportation routes will be the foundation to maintain continuous warfare capabilities and enable the U.S. Forces to come and assist in the defense of Japan.

In operations to ensure the safety of our maritime transportation, the SDF will combine various operations such as anti-sea, anti-submarine, anti-air and anti-mine

Fig. III-1-2-9

Example of Operations for Coping with the Landing of Invading Forces



operations to patrol,²⁰ defend SDF ships, and protect straits and ports, as well as setting up sea lanes²¹ to directly defend Japanese ships, etc. Aerial defense (anti-air

operations) for Japanese ships on maritime transportation routes will be conducted by destroyers, and support from fighter jets and other aircraft is provided as required.

5 Initiatives Related to the Protection of Civilians

1 Basic Policy on the Protection of Civilians and the Role of the MOD/SDF

In March 2005, based on Article 32 of the Civil Protection Act, the government established the Basic Guidelines for the Protection of the People. It anticipates four types of armed attack: (1) a land invasion, (2) an attack by guerrillas or special forces, (3) a ballistic missile attack, (4) an air attack, and points to consider in taking measures to protect civilians depending on the type of attack.

The MOD/SDF, based on the Civil Protection Act and the Basic Guidelines, have developed a Civil Protection Plan of the MOD and the Acquisition, Technology and Logistics Agency. This plan stipulates that in a situation

where Japan is under attack, the SDF would make utmost efforts to fulfill its basic task of repelling the attack. It also states that, within the scope of no hindrance to the task, the SDF would do as much as possible to protect civilians through support on evacuation and disaster relief.

See Part II, Chapter 5, 1-4 (Civil Protection), p. 236

2 Initiatives of the MOD/SDF to Facilitate Measures for Civilian Protection

(1) Civil Protection Training


For sound and expeditious implementation of measures to protect civilians, it is important to conduct training on a regular basis to ensure effective and efficient

²⁰ The act of systematically monitoring a specific area with the purpose of gathering information and intelligence to prevent a surprise attack by an opposing force.

²¹ Relatively safe marine areas defined to enable the transportation of ships. The locations and width of sea lanes change depending on the situation of a specific threat.

collaboration with concerned ministries, agencies and local governments. The MOD and the SDF hold exercises in cooperation with concerned ministries and agencies and with the participation of local governments and others. They also participate and cooperate in civil protection exercises held by other ministries, agencies and local governments.

For example, joint civil protection training was hosted by the central government (Cabinet Secretariat and the Fire Defense Agency) and local governments (Oita Prefecture and Nakatsu City) in Nakatsu City, Oita Prefecture, in November 2020. The Joint Staff and units of the GSDF Western Army and ASDF Western Air Defense Force participated in the preparatory training for an incident at an international sports event.

 **See** Reference 12 (Participation of the MOD/SDF in Civil Protection Joint Training Exercises with Central and Local Government Bodies [2020])

(2) Ongoing Collaboration with Local Governments

The MOD/SDF are establishing liaison departments in Regional Armies and Provincial Cooperation Offices to ensure ongoing and close collaboration with local governments and other bodies.

Civilian protection councils are also being established in local governments for comprehensive implementation of measures to protect civilians. Representatives of each branch of the SDF and Regional Defense Bureau officials have been appointed to the councils.

Moreover, local governments are recruiting retired SDF officers to serve as crisis managers. For example, they act as coordinators with the MOD/SDF, as well as developing and implementing joint action plans and exercises.

Section 3

Responses in the Domains of Space, Cyberspace and Electromagnetic Spectrum

Among the roles that must be served by Japan's defense capability as set forth in the NDPG, the idea of "(3) response in space, cyber and electromagnetic domains during all phases" is as follows.

In order to prevent any actions that impede its activities in space, cyberspace and electromagnetic domains, the SDF, on a steady-state basis, conducts persistent monitoring as well as collection and analysis of relevant information. In the event of the above-mentioned interference, the SDF will promptly identify

incidents and take such measures as damage limitation and recovery. In case of an armed attack against Japan, the SDF will, on top of taking these actions, block and eliminate the attack by leveraging capabilities in space, cyberspace and electromagnetic domains.

Furthermore, in light of society's growing dependence on space and cyberspace, the SDF will contribute to comprehensive, whole-of-government efforts concerning these domains under appropriate partnership and shared responsibility with relevant organizations.

VOICE

Development of Planning Function for Joint Operations in New Domains

Colonel TSUI Shinichiro, Chief, Space Domain Planning Section, C4 Systems Planning Division, C4 Systems Department, Joint Staff (Shinjuku Ward, Tokyo)

The Space Domain Planning Section, which was just established in March 2021, is one of the few SDF divisions that bears the word "space" in its name. The role includes developing and coordinating various plans related to the space domain, as well as researching their equipment systems, so as to establish a more effective joint operations utilizing space. From the perspective of national security, I feel that working in the space domain, which will become even more important in the future, is very rewarding, and I also always feel a sense of great responsibility as a pioneer in opening up the new horizon.

Captain SHIBUYA Yoshihiro, Chief, Cyber Planning Office, C4 Systems Planning Division, C4 Systems Department, Joint Staff (Shinjuku Ward, Tokyo)

The Cyber Planning Office was established in March 2014. The office is in charge of developing and coordinating various plans related to the cyber domain and researching their equipment systems. Specific tasks include organizing the Cyber Defense Group, developing related equipment, providing various types of training including study abroad opportunities, and planning and managing joint training with other countries to improve our capabilities in the cyber domain. The cyber domain is an ever-evolving field, and therefore requires a high level of technical knowledge, which at times is very demanding for me. However, the office personnel are working hard in their daily duties, acquiring the necessary expertise and contributing to strengthening the capabilities of the MOD/SDF in the cyber domain.

Colonel KITAHARA Takeshi, Chief, Electromagnetic Domain Planning Section, C4 Systems Planning Division, C4 Systems Department, Joint Staff (Shinjuku Ward, Tokyo)

The Electromagnetic Domain Planning Section, which I work for, was newly established in March 2020 as part of the enhancement of Japan's posture related to the electromagnetic spectrum per the current Medium Term Defense Program.

The Section's main role is to plan various projects related to the electromagnetic domain and to research equipment systems. Specifically, in order to use electromagnetic spectrum appropriately and effectively in joint operations, we are responsible for building a system that contributes to coordinated and smooth electromagnetic spectrum management operations, formulating agreements among the SDF services, and planning and organizing training and exercises related to the electromagnetic spectrum. The use of electromagnetic spectrum is essential for the SDF to carry out its missions, and I am determined to strive to ensure the superiority of the MOD/SDF in the electromagnetic domain.



Logo of the C4 Systems Department of the Joint Staff Office



The authors considering project requests for new domains (in the center of the right-hand side of the desk: Tsui, in the front of the right-hand side of the desk: Shibuya, in the back of the right-hand side of the desk: Kitahara)

1 Responses in Space Domain

1 The Whole-of-Government Approach

The National Space Policy Secretariat¹ established in the Cabinet Office in April 2016 engages in the planning, drafting, coordinating, and other policy matters relating to the Government's development and use of space. In light of the environmental changes surrounding space policy and the new security policies stated in the National Security Strategy (NSS) that was approved by the Cabinet in 2013, the new Basic Plan on Space Policy was decided upon in June 2020. This Plan, which aims to make Japan become a self-sustained space-faring nation, set goals of (1) contributing to a wide range of national interests; and (2) strengthening the comprehensive foundations of Japan's space activities including industrial, scientific and technological bases. In particular, concerning the contributions to a variety of national interests, the plan states that Japan should advance: (1) ensuring space security; (2) contributing to disaster management, national resilience, and solving global issues; (3) creating new knowledge through space science and exploration;

and (4) realizing economic growth and innovation for which space is the driving force.

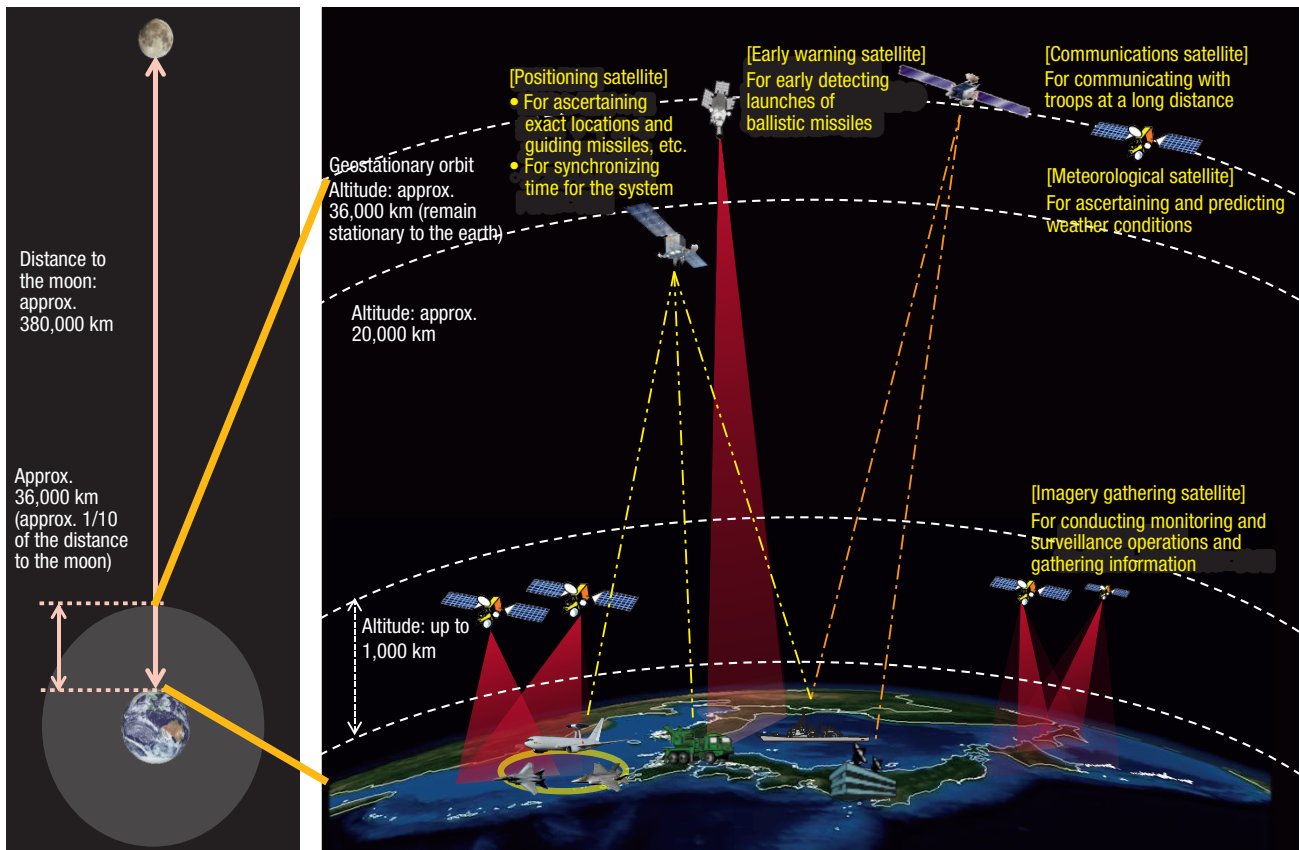
Responding to Japan's progress in development and use of outer space, the Diet approved the Act on Ensuring Appropriate Handling of Satellite Remote Sensing Data (Remote Sensing Data Act) and the Act on Launching of Spacecraft, etc. and Control of Spacecraft (Space Activities Act) in November 2016, and the Remote Sensing Data Act and part of the Space Activities Act went into effect in November 2017.

In addition, the Space Activities Act stipulates matters necessary to secure public safety and provide prompt protection of the victims from damages in Japan's space development and use, such as a launch permit system, obligation for reparation, and government compensation, and in November 2018 the Act went into effect.

2 Initiatives of the MOD/SDF

The complexity in outer space has recently been increasing, such as through the importance of outer space

Fig. III-1-3-1 Conceptual Image of Utilization of Space in the Security Field



¹ In April 2016, the Office of National Space Policy was reorganized into the National Space Policy Secretariat.

in security, the growing dependence of the economy and society on space systems, the increasing risks, the more active space activities from other countries and the private sector, the expansion of space activities, and the rapid evolution of science and technology.

Based on the Mid-Term Defense Program (MTDP), the MOD/SDF will work to enhance capabilities to ensure superiority in the use of space at all stages from peacetime to armed contingencies. The efforts include (1) establishing a Space Situational Awareness (SSA) system in order to secure the stable use of space; (2) improving various capabilities to leverage space domain including information-gathering, communication and positioning capabilities; (3) developing the capability to disrupt C4I (command, control, communication, computer, and intelligence) of opponents in collaboration with the electromagnetic domain; and (4) working to enhance cooperation with relevant agencies, including the Japan Aerospace Exploration Agency (JAXA), and with the United States and other relevant countries. The SDF will also engage in such organization building as the creation of units and a career field specializing in space, and is developing human resources and accumulating knowledge and expertise in the space domain.

 See Fig. III-1-3-1 (Conceptual Image of Utilization of Space in the Security Field)

(1) Strengthening SSA

When using outer space, it is necessary to ensure its stable use. However, there has been a rapid increase in the volume of space debris in outer space, raising the risk of significant damage to satellite functions caused by collision between debris and satellite.

In addition, it is pointed out that the development and verification test of killer satellites to approach a target satellite to disrupt, attack, and capture it is underway, increasing the threat to the space system on which Japan's security, economy, and society depend.

That is why the MOD, based on the Basic Plan on Space Policy and through cooperation with relevant government agencies and ministries, such as the JAXA, and the United States, etc., is aiming to strengthen SSA in order for the governments to work as a whole to monitor outer space and to accurately identify situations.

Following the establishment of the Space Operations Squadron in May 2020, a new unit responsible for the command and control of planning and carrying out a variety of activities in the space domain will be founded in FY2021. Additionally, the Space Operations Group (tentative name) is to be established as the senior unit of the two squadrons. These moves aim to strengthen the units specializing in the space domain. Furthermore, in addition to promoting a variety of initiatives for the

actual operation of the SSA system, which is scheduled for FY2023, initiatives to introduce SSA satellites (space-based optical telescopes), etc., are underway with the goal of launching them in FY2026.

In doing so, along with continuously participating in multilateral space situational awareness tabletop exercises (Global Sentinel), the development of the SSA system will be effectively promoted via the dispatch of SDF personnel to the U.S. Space Command. In addition, the Space Operations Squadron conducted the SSA training in the Japan-U.S. Bilateral Joint Field Training Exercise (FTX) "Keen Sword 21" that was conducted from October to November 2020.

Through personnel exchanges across both the public and private sectors, the MOD is working to develop and utilize core human resources in the SSA field.

Furthermore, in order to build SSA-related capacity and to strengthen that capacity in the future, the MOD is promoting specific efforts for the specification of the necessary operational procedures for SSA in collaboration with the United States, cooperation with relevant government agencies and ministries such as JAXA, bilateral and multilateral cooperation with the United States and France, etc., and an examination of systems to share SSA-related information with private-sector businesses, etc. Plus, with regards to electromagnetic environmental information in outer space, the MOD is promoting collaboration with the National Institute of Information and Communications Technology (NICT) on the utilization of space weather information.

 See Fig. III-1-3-2 (Initiatives for Developing the SSA System)

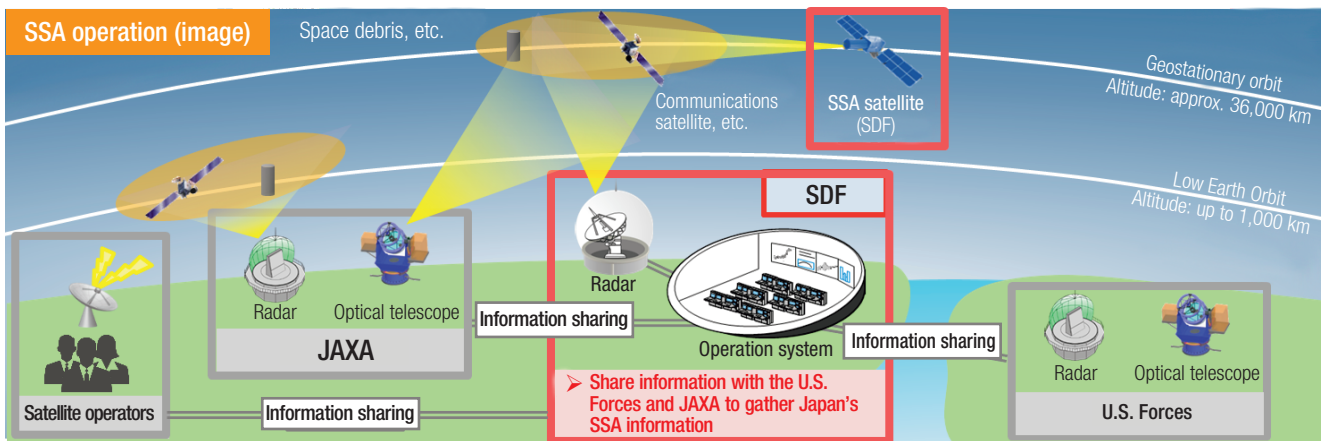
(2) Improving Various Capabilities to Leverage Space Domain Including Information-Gathering, Communication and Positioning Capabilities

While the MOD/SDF has conducted information-gathering, communication and positioning using satellites, from the perspective of strengthening Command, Control, Communication, Computer, Intelligence, Surveillance, Reconnaissance (C4ISR) functions, the MOD/SDF will ensure redundancy by receiving signals from multiple positioning satellites, including from the Quasi Zenith Satellite System (QZSS), and by using commercial satellites, etc.

The MOD/SDF will strengthen its intelligence and surveillance capabilities through acquisition of multilayered satellite images such as by using Information Gathering Satellites (IGS) with the aim of a 10 satellite system, and by using commercial satellites such as small satellite constellations that enable frequent imaging.

It will also continue to use images from the satellite operated by JAXA (ALOS-2) and information from Automatic Identification System (AIS), etc., and will

Fig. III-1-3-2 Initiatives for Developing the SSA System



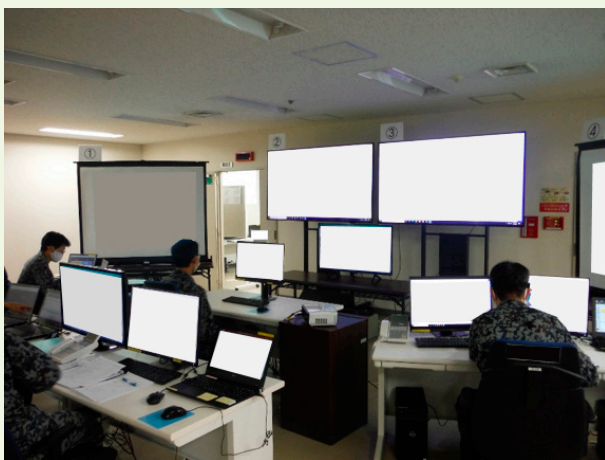
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Characteristics of the Space Domain and a Space Domain Simulators

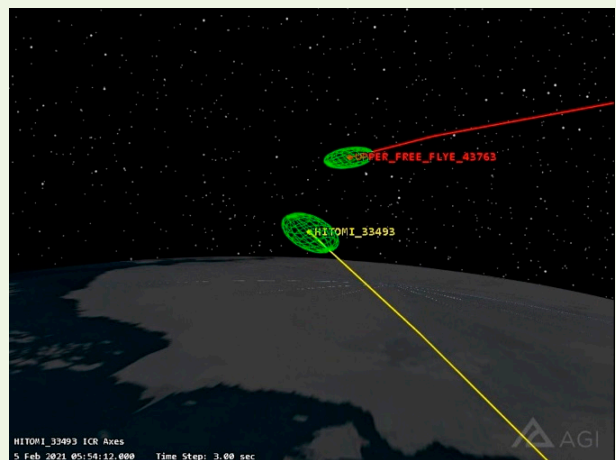
To establish a space situational awareness space surveillance system, the MOD is currently developing a radar system to monitor space debris that pose a threat to Japan's artificial satellites, and an operation system to collect, process, and share information. Space debris and satellites need to be monitored at various altitudes and orbits, and there are external forces that affect the motion of these satellites. One of the most important techniques for recognizing threats to satellites is understanding the characteristics of various orbits and the effects of external forces, and then analyzing, for example, when, where, and to what extent satellites and space debris will approach each other. Accurately recognizing the situation in near Earth space requires cooperation with related domestic organizations, space-related companies, and countries including the United States. It also requires establishing guidelines for cooperation across various related

departments. The training of personnel in the knowledge and skills necessary for operations in space is required before the full-scale operation of the system begins.

For this reason, the Air Self-Defense Force introduced space operations simulators in October 2020, which are being used to train personnel. These simulators can simulate observation data of space objects from radar and optical telescopes, determine their orbits, simulate space - including the Earth - simulate various assets, analyze various events such as the approach and re-entry of space objects, and create space-based events for use in education and training. The simulators' systems are based around general-purpose software. Personnel work hard every day, using these simulators in their education and training to acquire the knowledge and skills necessary to perform operations in space.



Training using the space domain simulators



Simulation results for proximity events

mount a sensor on JAXA's Advanced Land Observing Satellite-3 (ALOS-3) to conduct research on dual wavelength infrared sensors.²

Regarding communications, the MOD/SDF launched X-band defense communications satellites called Kirameki-2 in January 2017 and Kirameki-1 in April 2018, owned and operated by the MOD for the first time, to be used for the communications, which is essential for command and control in unit operations. Going forward, in order to respond to the increase in communication requirements and to further strengthen resiliency, the MOD will aim for a system of three X-band defense communications satellites by launching Kirameki-3 in FY2022. The ministry will also conduct research and surveys on the next defense communication satellites.

With regard to positioning, the MOD/SDF mounts GPS receiving terminals on a large number of equipment and uses them as important means to support troop movement, including highly accurate self-positioning and improvement of missile guidance. In addition to these efforts, the QZSS³ of the Cabinet Office started service in November 2018. With this in mind, the MOD/SDF will secure redundancy by using multiple positioning satellite signals, including QZSS. In addition, in order to strengthen the resiliency of satellite positioning capabilities, the budget for FY2021 included the necessary expenditures required for research on multi-GNSS receivers, including the public signals from QZSS.

(3) Enhancing Capabilities to Ensure Superiority in Use of Space

While utilization of satellites plays a vital role as the basic infrastructure for security, some countries appear to be developing anti-satellite weapons, including killer satellites, anti-satellite missiles, and jamming weapons that interfere with electromagnetic waves. In this context, it is also important for the MOD/SDF to strengthen satellite resiliency.

For this purpose, the SDF, as part of strengthening the resiliency of space utilization, is proceeding with the introduction of devices to grasp the state of electromagnetic interference against Japanese satellites.

The SDF will build the capability to disrupt C4I of opponents in coordination with the electromagnetic domain capabilities.

Furthermore, in the way of situations around technologies related to functions such as early warnings, missile detection, and tracking, the SDF will study



ASDF personnel participating in Global Sentinel

small satellite constellations while also bearing in mind cooperation with the United States, and will promote the accumulation of technical knowledge through research on dual wavelength infrared sensors and the research of future sensors such as high-sensitivity wideband infrared detection elements.

(4) Enhancing Cooperation with Relevant Agencies and with the United States and Other Relevant Countries

In order to ensure Japan's space security and the sustainable and stable use of outer space, while strategically cooperating with allies and friendly countries and from a comprehensive perspective that includes measures against space debris, etc., it is necessary to play an even greater role in creating effective rules and to request each country's responsible behavior in outer space.

At the same time, in order to avoid the risks from misunderstanding and miscalculation, it is necessary to communicate the importance of strengthening communication among relevant countries and of implementing Transparency and Confidence Building Measures (TCBM) in outer space.

Also, for the MOD to promote space development and use effectively, it is essential to enhance cooperation with relevant agencies with advanced knowledge, including JAXA, and with the United States and other relevant countries.

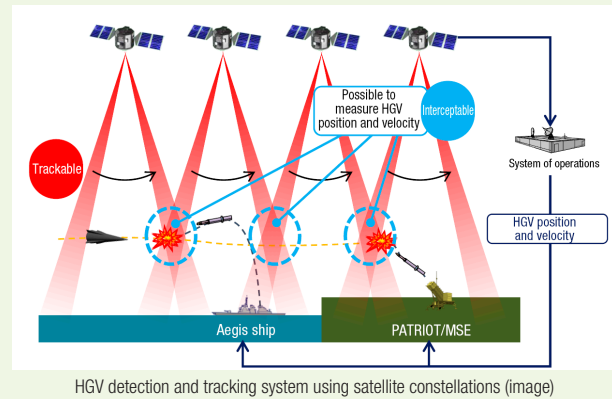
From the perspective of further promoting cooperation in the space field between the defense authorities of Japan and the United States, the two countries established the "Japan-U.S. Space Cooperation Working Group (SCWG)" in April 2015 and so far held seven meetings.

² Research is underway to mount dual wavelength infrared sensors with excellent detection and identification performance on the Advanced Optical Satellite planned at JAXA and activate them in the space environment.

³ This refers to satellites set into orbit so that the satellites are capable of staying nearly right above one specific area by tilting the orbit, while ordinary stationary satellites stay on the equator. Multiple satellites are usually launched since a single satellite cannot stay online for 24 hours by itself. Users are able to receive signals from such satellites without being affected by obstacles, such as mountains and buildings, since the satellites pass nearly right above the users.

Study on Utilization of Satellite Constellations for Missile Defense

In recent years, the United States and other countries have been promoting the so-called satellite constellation project, which sees a number of small artificial satellites perform various functions in unison. The project is expected to contribute to enhanced abilities of information collection to perform in space and to maintain satellite functionality in the event of damage. It is pointed out that, there have been developments of hypersonic glide weapons (HGVs) in some countries, which fly at low altitudes at high speeds and in irregular orbits. In FY2021, MOD will conduct studies of the concept of HGV detection and tracking systems using satellite constellations and research on advanced infrared sensors, with collaboration with the United States in mind.



The SCWG continues to further promote consideration in broader fields such as: (1) promotion of space policy-related consultation, (2) closer information sharing, (3) cooperation for training and securing space experts, and (4) implementation of tabletop exercises.

As part of these efforts, the MOD has continuously participated in the U.S. Space Force-sponsored multilateral

“Schriever Wargame” tabletop exercise on space security since 2018, and also has personnel join in the U.S. military’s curriculum (Space100, etc.) in order to have them acquire general knowledge about space.

 See Chapter 2, Section 2-1-1 (Cooperation on Space), p. 314
Chapter 3, Section 3-1 (Cooperation in the Use of Space Domain), p. 397

2 Response in Cyber Domain

1 The Whole-of-Government Approach and Other Initiatives

With regard to cybersecurity, the number of cases that were detected as suspicious communication to Japanese governmental organizations include 55 suspected malware infections and 30 targeted attacks in FY2019. The actual threat level continues to be high, with the attack methods being increasingly sophisticated and ingenious.⁴

As for organizations other than governmental organizations, multiple suspicious communications to private companies, including defense-related companies, have been confirmed. In addition, there were cases in which investigations by police authorities concluded that it was likely that the People’s Liberation Army units were involved in cyber attacks against multiple companies.

In order to deal with the increasing threat to cybersecurity, in November 2014, the Basic Act on Cybersecurity was enacted. The Act aims to contribute to

the security of Japan by comprehensively and effectively promoting the measures regarding cybersecurity.

In response to this, in January 2015, the Cybersecurity Strategic Headquarters was established in the Cabinet, and the National center of Incident readiness and Strategy for Cybersecurity (NISC)⁵ was established in the Cabinet Secretariat. The Cybersecurity Strategic Headquarters and NISC are responsible for planning and promotion of cybersecurity-related policies and serve as the control tower in taking measures and responding to significant cybersecurity incidents in government organizations and agencies, as well as critical infrastructures.

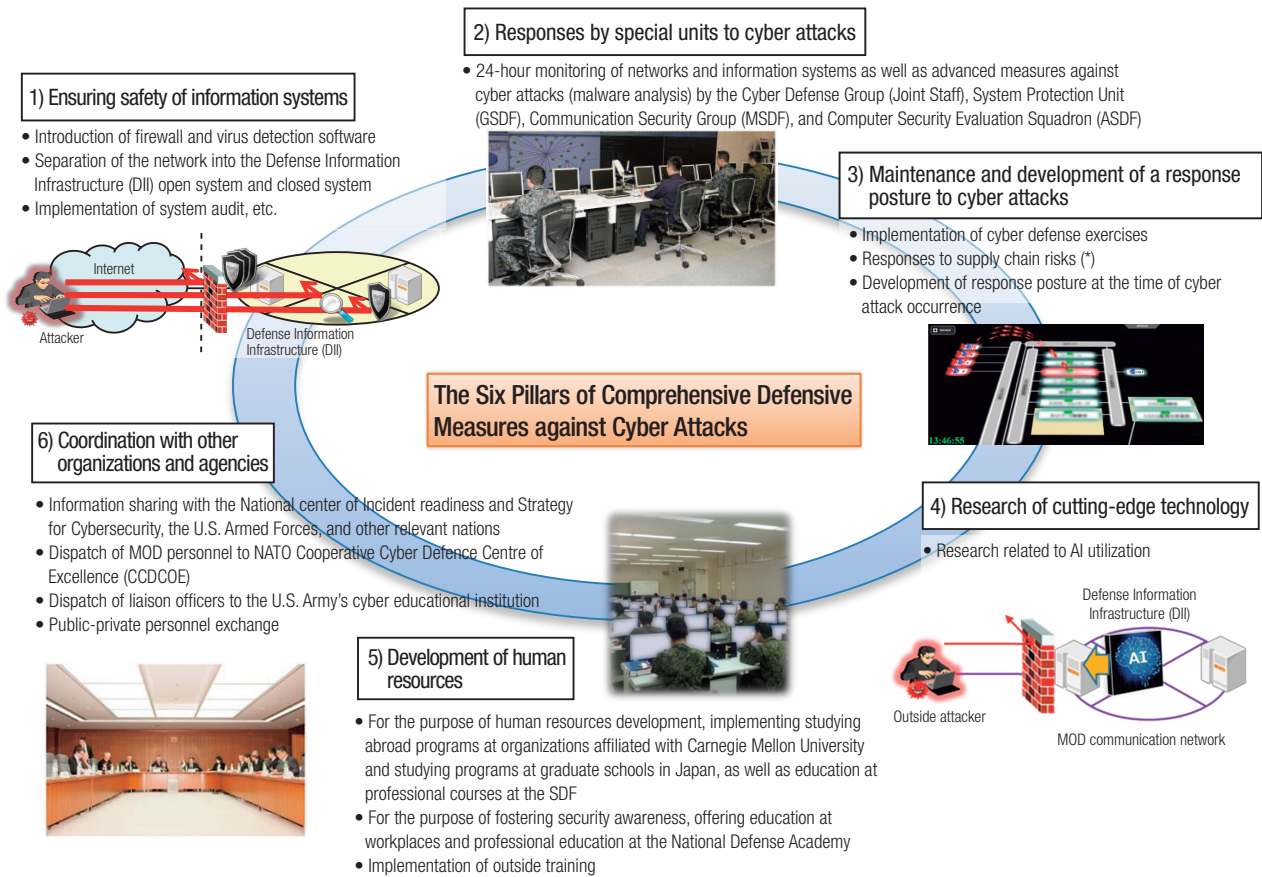
Furthermore, in September 2015, the Cybersecurity Strategy was formulated for the comprehensive and effective promotion of measures pertaining to cybersecurity, with the aims to create and develop free, fair and safe cyberspace to enhance the vitality of the economy and society and realize their sustainable development, to realize a society in which citizens can

⁴ Cybersecurity 2020 (approved by the Cybersecurity Strategic Headquarters on July 21, 2020)

⁵ With the enactment of the Basic Act on Cybersecurity in January 2015, the National Information Security Center (NISC) was reorganized as the National center of Incident readiness and Strategy for Cybersecurity (NISC). The NISC is responsible for the planning and promotion of cybersecurity-related policies and serves as the control tower in taking measures and responding to significant cybersecurity incidents in government organizations and agencies, as well as critical infrastructures.

Fig. III-1-3-3

MOD/SDF Comprehensive Measures to Deal with Cyber Attacks



* Interagency Agreement for Government Procurement of IT system, Equipment and Services and Procurement Procedure were established in December 2018 under the leadership of the National center of Incident readiness and Strategy for Cybersecurity (NISC) of the Cabinet Secretariat in order for a government agency to verify whether equipment contains supply chain risks when procuring IT equipment or information systems. The MOD also strives to ensure the cybersecurity of equipment based on this policy.

live safely and with peace of mind, and to contribute to the peace and stability of the international community as well as the security of Japan.

Furthermore, in July 2018 the strategy was reviewed to promote cybersecurity for sustainable development and initiatives from three perspectives ((1) mission assurance by service providers, (2) risk management, and (3) participation, cooperation and collaboration), while adhering to the basic position of the strategy.

2 Initiatives of the MOD/SDF

Information and communications networks that leverage cyberspace form a foundation for the SDF's activities in various domains, and any attack against them would seriously disrupt the organized activities of the SDF.

The MOD/SDF are taking comprehensive measures such as (1) ensuring safety of information systems, (2) dealing with cyber attacks⁶ via specialized units,

(3) maintenance and development of a response posture to cyber attacks, (4) research of cutting edge technologies, (5) development of human resources, and (6) coordination with other organizations and agencies, etc.

In this context based on the NDPG, the SDF will fundamentally strengthen its cyber defense capability, including the capability to disrupt the opponent's use of cyberspace for the attack against Japan in time of emergency. Specifically, the MTDP stipulates (1) establishment of the necessary environment for ensuring cybersecurity, (2) keeping abreast of the latest information including cyber-related risks, counter measures and technological trends, (3) development and securing of human resources, and (4) contribution to the whole-of-government initiatives.

 **See** Fig. III-1-3-3 (MOD/SDF Comprehensive Measures to Deal with Cyber Attacks)
Reference 13 (Efforts in Recent Years by the MOD on Cybersecurity)

⁶ Illegal intrusion, information theft, alteration or destruction, operation stop/malfunction of information system, execution of unauthorized program, DDoS (distributed denial of service) attacks, etc., which are made through cyberspace by abusing information communication networks, information systems, etc.

(1) Establishing an Environment for Ensuring Cybersecurity

a. New Establishment of the SDF Cyber Defense Force (tentative name)

The NDP and MTDP states the new establishment of a “Cyber Defense Force” as a joint unit so as to drastically strengthen cyber defense capabilities. Based on these documents, in FY2021, in addition to the expansion of the system of the Cyber Defense Unit, etc., integration of cyber protection functions of the Ground, Maritime, and Air SDFs into one joint unit of JSDF Cyber Defense Command (tentative name) will be initiated, thereby enhancing the organization by approximately 160 personnel. The newly formed JSDF Cyber Defense Command (tentative name) will primarily deal with cyber attacks, as well as conduct capacity building for the SDF’s cyber-related units, and maintain and operate the Defense Information Infrastructure (DII),⁷ a common network for the MOD/SDF.

b. Strengthening Capabilities of Information Gathering, Research and Analysis

In order to secure functions of the system and network of the MOD/SDF under any circumstance, it is necessary to strengthen the capabilities of information gathering, research and analysis, and develop a practical training environment.

To this end, the MOD/SDF will continue initiatives such as (1) upgrading of information gathering devices for indications and techniques of cyber attacks, (2) enhancement of response capabilities against cyber attacks utilizing AI and other advanced technologies, and (3) development of an environment for cyber exercises carried out as competition between an attacking team and a defending team.

In addition, the Defense Intelligence Headquarters also collects and analyzes necessary information on trends in cyberspace threats, such as by collecting open source information and exchanging information with other countries.

(2) Keeping Abreast of the Latest Information Including Risks, Counter Measures and Technological Trends

In order to respond to cyber attacks in a swift and appropriate manner, it is necessary to keep abreast of the latest information, including cyber-related risks, counter measures and technological trends, through cooperation with the private sector, and strategic talks, joint exercises and other opportunities with allies and other parties. For this purpose, the MOD/SDF will effectively cooperate with private companies and foreign countries, including the United States, which is Japan’s ally.

a. Cooperation with Private Companies and Others

In Japan, in July 2013, the Cyber Defense Council (CDC) was set up with its member consisting of around ten companies in the defense industry with a strong interest in cybersecurity. With the MOD serving as the hub for information sharing among companies in the defense industry, the information will be aggregated, and efforts will be made to grasp the overall picture of cyber attacks. In addition, a joint training takes place annually, simulating a situation where the MOD/SDF, and defense industry are under cyber attacks as part of efforts to improve both of their cyber response capabilities.

b. Cooperation with the United States

Since it is vital to have comprehensive defense cooperation, including joint response, between Japan and its ally the United States, the Japanese and U.S. governments, as their main framework for cyber cooperation, first set up the Cyber Defense Policy Working Group (CDPWG) as a framework between the defense authorities of Japan and the United States. Under this framework, meetings have been held seven times to discuss the following topics: (1) promotion of policy discussions regarding cyber issues, (2) closer sharing of information, (3) promotion of joint exercises incorporating response to cyber attacks, and (4) matters such as cooperation for training and retaining experts.

In addition, Japan’s cooperation with the United States is to be further strengthened by such means as participation in “the Japan-U.S. Cyber Dialogue,” a whole-of-government framework by both nations, and holding “the Japan-U.S. IT Forum.”

 Chapter 2, Section 2-1-2 (Cooperation on Cyberspace), p. 314

c. Cooperation with Other Countries etc.

Japan has organized the “Japan-NATO Expert Staff Talks on Cyber Defense,” etc., with the respective defense authorities of the North Atlantic Treaty Organization (NATO) and others to exchange opinions on various issues related to cyberspace, and has continued to participate in cyber defense exercises organized by NATO and the NATO Cooperative Cyber Defence Centre of Excellence (CCDCOE) to enhance cooperation and collaboration with NATO.

In addition, Japan has held cyber dialogues with Australia, the United Kingdom, Germany, and Estonia.

Furthermore, the IT Forum has been held with the defense authorities of Singapore, Vietnam, and other countries to exchange views on initiatives in the information communications area including cybersecurity and current trends in technology.

⁷ Common network for the entire SDF, with the information and communications infrastructure necessary to perform the SDF’s duties, which is composed of data communications networks and voice communications networks and uses various lines such as self-operated micro lines owned by the MOD, external lines rented from telecommunications carriers, and satellite lines

 Chapter 3, Section 3-2 (Cooperation in Use of Cyber Domain), p. 397

(3) Development and Securing of Human Resources

In order to strengthen the cyber defense capability of the SDF, it is necessary to secure human resources with advanced and broad-ranging knowledge on cybersecurity.

In this context, personnel are continuously and by stages assigned to cyber-related departments, and provided with both internal and external education in order to acquire and maintain advanced knowledge and skills.

To this end, a common cyber course⁸ to learn common and sophisticated knowledge on cybersecurity has been provided since FY2019 as a common educational course for all SDF services, and the scale of which is planned to be expanded.

In addition, the SDF has continued to dispatch personnel to courses for cyber warfare commanders at the National War College in order to make them learn about commanders' decision-making processes in cyber warfare in the United States.

Furthermore, in addition to providing education utilizing external educational institutions, as well as to acquire human resources with broader background from outside, the SDF has implemented initiatives for recruiting the chief cybersecurity advisors with advanced and up-to-date knowledge about cyber technologies and cyber attack trends, and has held a MOD cyber contest for civilians.

The MOD/SDF also work to ensure appropriate treatment for security and IT human resources who work as a bridge between highly professional human resources and general administration departments in the MOD⁹ and consider the utilization of external human resources through a public-private personnel



Member of Cyber Defense Group responding to increasingly sophisticated, skillful cyber attacks

exchange system to employ people with practical experience in private companies as well as contracts for service, for example.

(4) Contribution to the Whole-of-Government Approach

Along with the National Police Agency, the Ministry of Internal Affairs and Communications, the Ministry of Economy, Trade and Industry, and the Ministry of Foreign Affairs, the MOD, as one of the five government agencies that are members of Cybersecurity Strategy Headquarters, participates in cyber attack response training and personnel exchanges, and provides information about cyber attacks, etc. to the cross-sector initiatives led by the NISC as well as sending personnel to the Cyber Incident Mobile Assistance Team (CYMAT).¹⁰

The MOD is considering applying the knowledge and experience of the SDF to penetration tests of the IT systems of government ministries and agencies conducted by NISC.

3 Response in Electromagnetic Domain

Electromagnetic spectrum¹¹ has been used for command/communication, and monitoring/surveillance. With the development of the technology, its use has expanded in range and purpose, and it is now recognized as a major operational domain situated on the frontline of the

offense-defense dynamic in today's warfare.¹²

In such a situation, securing superiority in the electromagnetic domain is extremely important for strengthening deterrence and also the realization of cross-domain operations.

⁸ Common cybersecurity education provided for graduates of an IT-related program that is provided by each SDF service

⁹ Measures based on "the Comprehensive Policy for Enhancing the Development of Security and IT Human Resources at Governmental Organizations" (Approved by the Cybersecurity Strategic Headquarters on March 31, 2016)

¹⁰ Cyber Incident Mobile Assistance Team (CYMAT) (established in June 2012): Team that provides technical support and advice to prevent the spread of damage, engage in recovery, investigate the cause, and obviate recurrence when an information security-related event occurs in need of a unified response by the government.

¹¹ Collective term for radio waves, infrared rays, visible rays (light), ultraviolet rays, and X-rays, etc. Concerning radio waves used in Japan, the Ministry of Internal Affairs and Communications has centralized control over radio wave frequencies, and the MOD/ SDF has obtained approval for radio wave frequencies from the Ministry when using them in training and other initiatives.

¹² One of the attacks using electromagnetic waves is an electromagnetic pulse (EMP) attack, which places an extreme burden on electronics by generating instantaneous powerful electromagnetic waves through nuclear explosions and other means, leading to their malfunctioning or destruction. Since this type of attack would impact not just the defense field but Japanese people's lives in general, the Government of Japan as a whole will deliberate on necessary countermeasures against it.

As the threat of cyber attack has become increasingly complex and sophisticated, it is of urgent importance for Japan to improve its cyber capability and secure a stable supply of excellent human resources with expertise in cybersecurity.

As a new way to secure human resources, the Ministry of Defense Cyber Contest was held online on March 14, 2021, with the aim of uncovering talented individuals with expertise in cybersecurity.

The MOD will continue to take various initiatives to secure excellent cyber human resources and make efforts to drastically strengthen cyber defense cooperation.



The poster for recruiting participants

In response, the MOD/SDF, based on the NDPG, etc., will (1) enhance its ability to appropriately manage and coordinate the use of electromagnetic spectrum, (2) strengthen information collection and analysis capabilities related to electromagnetic spectrum, and develop an information sharing posture, (3) strengthen capabilities to neutralize the radar and communications of opponents who intend to invade Japan, and thereby acquire and enhance capabilities to ensure superiority in the electromagnetic domain.¹³

1 Enhancing the Ability to Appropriately Manage and Coordinate the Use of Electromagnetic Spectrum

In order to gain an advantage in warfare by using electromagnetic spectrum proactively and effectively, it is necessary to build capabilities to manage electromagnetic spectrum by centrally grasping and coordinating wave frequencies and status of use, and appropriately allocating frequency resources to units, etc. in addition to electronic warfare capabilities to ensure the use and effect of electromagnetic spectrum while interfering with the use and effect by an enemy.

For this purpose, capacity building in electromagnetic spectrum management is progressing, such as with the start of research on electromagnetic spectrum management support technologies to understand the status of the electromagnetic spectrum used by

equipment communication devices, radar, and electronic warfare devices, etc., to calculate the emission direction and propagation distance of radio waves, and to visualize them on monitors.

See Fig. III-1-3-4 (Electronic Warfare Capabilities and Electromagnetic Spectrum Management Capabilities [image])

2 Strengthening Information Collection and Analysis Capabilities Related to Electromagnetic Spectrum, and Building an Information Sharing Posture

In order to gain an advantage in electromagnetic warfare, it is important to gather and analyze information on electromagnetic spectrum at all phases from peacetime to armed contingencies and appropriately share the information among SDF units.

To this end, the MOD/SDF plans to enhance information gathering and analysis capabilities through: establishment of electromagnetic operation units to gather information regarding electromagnetic spectrum as subordinate units of the Ground Component Command; under the FY2021 budget, acquire equipment (that will be) installed in ASDF RC-2 aircraft with equipment for electromagnetic spectrum information gathering to expand frequency reception bands and to improve long-distance target collection capabilities, and, prior to the development of the successor to the MSDF's multi-purpose EP-3 aircraft, conduct research on information

¹³ In addition, the MOD/SDF is advancing the multiplication of the communications network required for information sharing among the SDF services across Japan, and conducting research in light of EMP protection.

Fig. III-1-3-4

Electronic Warfare Capabilities and Electromagnetic Spectrum Management Capabilities (image)

In order to effectively and proactively utilize electromagnetic spectrum, the following capabilities need to be enhanced.

- (1) Electronic warfare capabilities: capabilities to effectively and proactively utilize electromagnetic spectrum
- (2) Electromagnetic spectrum management capabilities: capabilities to appropriately manage and coordinate the use of electromagnetic spectrum by ascertaining the status of electromagnetic spectrum in the theater and preventing interference with the aim of securing electronic warfare capabilities

Electronic Warfare	Electronic attack	○ Reduces or disables the other party's ability to communicate or search by firing electromagnetic waves against the other party's communication equipment, radar, etc.
	Electronic protection	○ Reduces and disables the influence of electromagnetic waves on the other party by stealthing equipment and increasing durability against communication interference.
	Electronic warfare support	○ Collects and analyzes information on electromagnetic waves used by the other party, which is necessary for electronic attacks and electronic protection.

[Electronic attack]

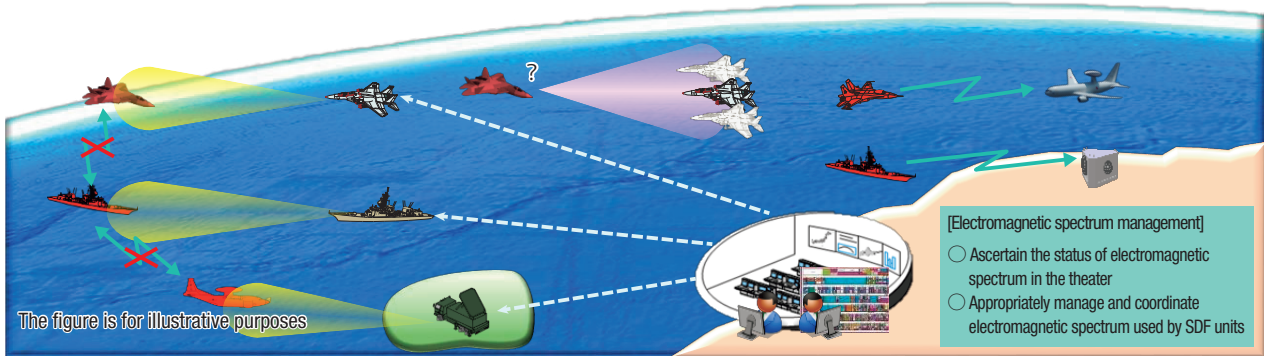
- Emit electronic waves to communication devices and radars of an enemy, thereby reducing or disabling their communication

[Electronic protection]

- Reduce or nullify the impact of electromagnetic spectrum used by an enemy by using stealth technology

[Electronic warfare support]

- Collect and analyze such information as electromagnetic spectrum used by an enemy



collection systems that utilize the latest technologies such as AI to enhance signal detection capabilities, directional accuracy, and type identification capabilities. In order to share the information among SDF services while ensuring security of the information, the SDF will continue to promote the upgrade of the JADGE system, the connection of each SDF service's systems, including the Defense Information Infrastructure (DII) and the improvement of each SDF service's data links.

3 Strengthening Capabilities to Neutralize Radar and Communications of an Opponent who Intends to Invade Japan

Neutralizing use of electromagnetic spectrum, including radar and communications of an opponent who intends to invade Japan based on information gathering and analysis in peacetime is effective as a means for the defense of Japan so that even when inferiority exists in individual domains such inferiority will be overcome and national defense accomplished.

To this end, under the FY2021 budget, the MOD/SDF will: acquire the GSDF's Network Electronic Warfare System (NEWS) that disables an opponent's use of the electromagnetic spectrum to provide advantages in a variety of battles, such as in the deployment of firepower or in land battles; develop ASDF standoff electronic warfare aircraft that implement effective electromagnetic

spectrum interference according to the interference target from outside an opponent's threat (standoff range) to support carrying out SDF air operations; and research ship-based electromagnetic spectrum detection and interference devices that can detect and identify the electromagnetic spectrum used by the radar and communications equipment on aircraft/missiles and then disable them.

In addition, for effective response against the threat of swarm attacks that use a large number of drones, a budget has been included for research on high-power microwave generators and demonstrations of vehicle-mounted laser systems, etc.

4 Training/Exercise and Human Resource Development

To strengthen the SDF's capabilities in the electromagnetic domain and to develop personnel with specialized knowledge, along with their regular education and training from peacetime, it is also important to participate in training, exercises, and education in the United States and other countries, which have advanced know-how backed by practical experience.

For this reason, in addition to conducting integrated electronic warfare training and strengthening operational capabilities in the electromagnetic domain, the MOD/SDF plans to gather latest knowledge related to the

electromagnetic domain and to acquire know-how by dispatching personnel to electronic warfare education courses in the United States, by participating in table top exercises held by the Royal Navy and electronic warfare symposiums held in the United States, etc.



Newly established 301st Electronic Warfare Company

Column

Contribution to Cross-Domain Operations through the Establishment of the Electromagnetic Spectrum Operations Unit in the Ground Self-Defense Force

On March 18, 2021, the Ground Self-Defense Force established a new unit specialized in the electromagnetic spectrum, the 301st Electric Warfare Unit, in the Western Army (Kumamoto City, Kumamoto Prefecture). As the unit is equipped with the Network Electronic Warfare System (NEWS), and it carries out missions such as collecting and analyzing information from the electromagnetic spectrum and neutralizing the use of radio waves by opponents, it is essential for cross-domain operations. The unit will enable the Ground Self-Defense Force to contribute to the establishment of a Multi-domain Defense Force, improving its capabilities in conventional domains by neutralizing the use of radio waves by opposing forces. It also supports firepower by neutralizing the use of radio waves by opposing forces and fights various types of battles including land battles favorably, which will contribute to improving capability in conventional domains.



Video: Ceremony for the new establishment of the Space Operations Squadron
URL: <https://youtu.be/48KOFCSfg9c>

Deployment of the RC-2 Signals Intelligence Aircraft

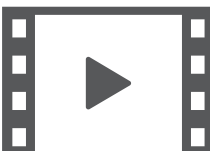
On October 1, 2020, the Air Self-Defense Force held a ceremony at Iruma Air Base to commemorate the deployment of the RC-2 (Signals Intelligence Aircraft). The RC-2 is the successor to the YS-11EB and was developed to respond to the expanding range of applications and uses of the electromagnetic spectrum with the aim of strengthening the SDF's capability to collect and analyze electromagnetic information and promoting the establishment of an information-sharing framework. Replacing the aging YS-11, the C-2, an indigenous transport aircraft, will be equipped with the new signal collection device, enabling the SDF to collect a wider range of information over a longer period of time.

The electromagnetic spectrum is essential for modern equipment. With the expansion of the range and applications of the spectrum, the need for the RC-2, with its advanced signal collection and analysis capabilities, is increasing from both defensive and offensive perspectives in current combat scenarios. In particular, the RC-2's intelligence-gathering and long-duration operational capabilities will be vital for dealing with the increasingly active airborne activities of neighboring

countries. With its information sharing capabilities the RC-2 is expected to play an active role not only within the Air Self-Defense Force, but also in joint operations with other Self-Defense Forces and in joint ISR activities with the U.S. Forces.

With the current warfare in which not only land, sea, and air domains but also new domains of space, cyber, and electromagnetic are combined due to technological developments, the deployment of the RC-2 is highly significant in terms of securing superiority in the electromagnetic spectrum and in realizing more effective cross-domain operations, across both the land, sea, and air, as well as in new realms including space, cyberspace, and the electromagnetic spectrum. Strengthening intelligence-gathering capabilities in the electromagnetic spectrum, the foundation of all other domains of operation, is indispensable for responding to the current security environment.

We will continue to conduct necessary testing and train personnel to operate the RC-2, steadily promote its development throughout the period of the current Mid-Term Defense Program, and make sure of Japan's defense.



Video: Commemorative ceremony of the dispatch of RC-2 aircraft with equipment for electromagnetic spectrum information gathering

URL: https://twitter.com/JASDF_PAO/status/1313313029849743362

Section 4

Response to Large-Scale Disasters, etc. (Including response to COVID-19)

1 Response to Large-Scale Disasters, etc. (Including response to COVID-19)

When disasters such as natural disasters occur, the SDF works in collaboration with local governments, engaged in various activities such as the search and rescue of disaster victims or ships or aircraft in distress, controlling floods, offering medical treatment, preventing epidemics, supplying water, and transporting personnel and goods.

1 Basic Concept

Among the roles that must be served by Japan's defense capability as set forth in the NDPG, the idea of "(4) response to large-scale disasters, etc." is as follows.

In the event of a major disaster, all possible measures will be taken to rapidly transport and deploy the SDF units required and if necessary, to sustain the mobilization for a long period. Not only will the SDF units respond to the needs of affected residents and local authorities through care, proper collaboration and cooperation, but they will also be engaged with institutions concerned, local authorities and the private sector to save lives, achieve urgent rehabilitation and support water supplies/bathing.

Since the damage situation is unclear at the beginning of a disaster, the SDF will maintain response readiness to any damage and need for activities while giving the first priority to life-saving activities. For livelihood support, the SDF will coordinate the role sharing, response policy, activity period, utilization of private companies, and other matters with relevant parties including the local governments and ministries concerned at the local response headquarters and other locations. In August 2020, a collaborative response manual for the removal, etc., of disaster waste was jointly formulated with the Ministry of the Environment.

In addition, based on the "Examination Report on

the Initial Response to the Heavy Rain in July 2018" (November 2018), in order to rescue and support more victims in the event of a large-scale disaster and considering possible confusion of the local authorities, the MOD/SDF will not only wait for requests from the authorities but also actively propose specific support activities by the SDF. In actual activities, the SDF will provide flexible support by accurately understanding needs, which change depending on the situation.¹ For this purpose, the SDF is strengthening dissemination of information so that people who truly need support by the SDF can easily access the information related to support.

Furthermore, the SDF has put in place arrangements for an initial response to ensure that disaster relief operations are conducted promptly. This is called "FAST-Force."

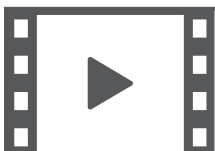
 See Part II, Chapter 5-4 (Disaster Relief Dispatches and Others), p. 240

2 Response by the MOD/SDF

(1) Response to Natural Disasters, etc.

a. Disaster Relief in Response to the Flooding Caused by Heavy Rain in July 2020

In July 2020, heavy rains around Kumamoto Prefecture caused rivers to overflow and floods to occur in the Kyushu, Chubu, and Tohoku regions, among others. The SDF sent liaison officers to coordinate closely with local governments, and, after disaster relief response requests from the Kumamoto Prefecture Governor, Fukuoka Prefecture Governor, Oita Prefecture Governor, and Yamagata Prefecture Governor, worked to save lives, supply water, provide bathing facilities, eliminate road obstacles to clear roads, support the accumulation of disaster waste, support epidemic control, distribute



Video: The MOD/SDF's official twitter account (for disaster response)

URL: https://twitter.com/modjapan_saigai



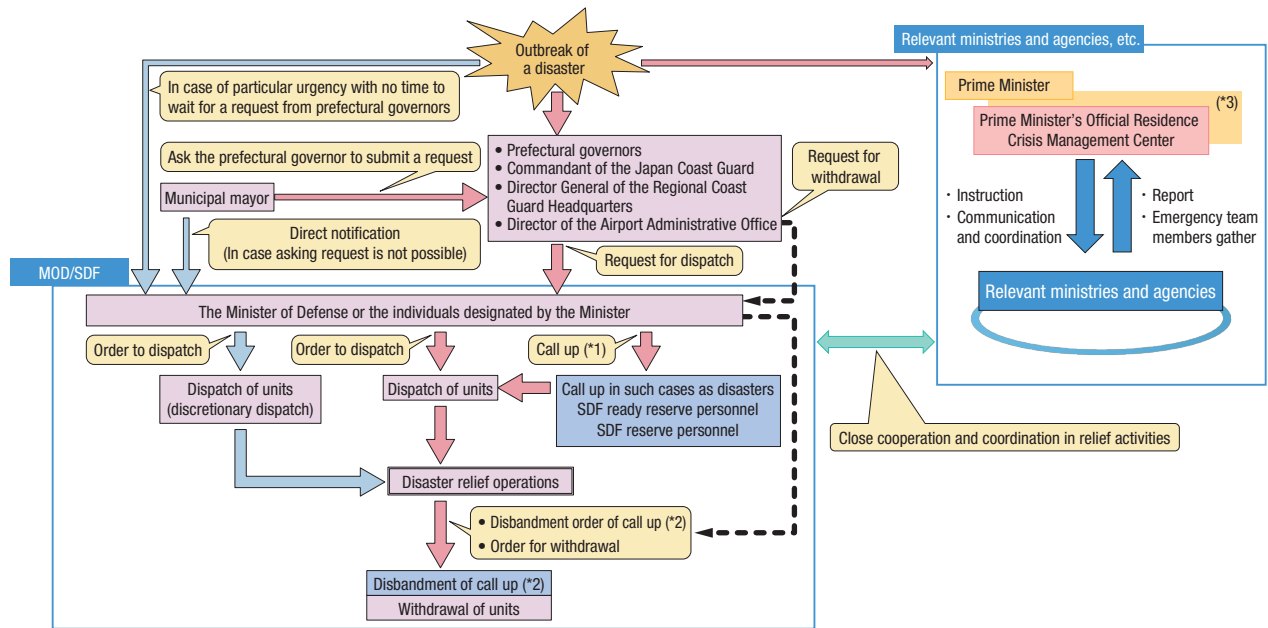
Video: Disaster relief in response to July 2020 Flooding Disaster

URL: <https://youtu.be/AeQMhAonXWQ>



¹ Recently, the scale of the SDF's disaster relief operations has become large and the period of the operations has also become long due to record heavy rains and typhoons. As the GSDP played a leading role in disaster relief operations in response to the 2019 Boso Peninsula Typhoon (Typhoon Faxai), the 2019 East Japan Typhoon (Typhoon Hagibis), and others, approximately 300 training/exercises were cancelled, scaled down, or postponed.

Fig. III-1-4-1 Flow from Request to Dispatch and Withdrawal and Response by the Government



Notes: 1. SDF ready reserve personnel and SDF reserve personnel will be called on by the Minister of Defense as necessary with the approval of the Prime Minister.
 2. Disbandment of call-up of SDF ready reserve personnel and SDF reserve personnel must be done by the Minister of Defense.
 3. In the event of emergencies, such as a natural disaster, nuclear disaster, or accident, an emergency team consisting of director-general level personnel of respective ministries and agencies is called on.
 Furthermore, in the event of a disaster of extreme severity, a ministerial meeting is held based on the Prime Minister's decision, and the government may establish an emergency headquarters or hold the National Security Council, depending on the circumstances.

Fig. III-1-4-2 State of Readiness for Disaster Relief (Standard)



Common to All	The state of readiness with which SDF troops can begin gathering information immediately after an earthquake of seismic intensity five-lower or higher occurs. * When an earthquake of seismic intensity five-upper or higher occurs, information is to be collected by using aircraft.
FAST-Force (GSDF)	First response units throughout Japan (about 3,900 personnel, about 1,100 vehicles, and about 40 aircraft) are on standby around-the-clock and will be deployed in an hour upon receiving an order as a standard procedure. Various units including helicopters (video transmission), chemical protection units, and bomb disposal units are on standby in each regional army.
FAST-Force (MSDF)	Vessels on standby: Designate one response vessel in each regional district Aircraft on standby (about 20 aircraft): Deploy in 15 minutes to two hours in each base as a standard procedure
FAST-Force (ASDF)	Standby for aircraft rescue and emergency transport duties (about 10-20 aircraft): Deploy within 15 minutes to two hours in each base as a standard procedure Aircraft on standby may commence information gathering as necessary for scrambling against aircraft intruding into Japanese territorial airspace.



SDF personnel transporting goods during the heavy rain in July 2020



GSDF personnel transporting relief supplies to isolated communities at the time of the Heavy Rain Event of July 2020 (Kuma Village)



MSDF personnel engaging in activities to save lives at the time of the Heavy Rain Event of July 2020



GSDF personnel giving an explanation to Okinawa Electric Power Company employees prior to air transport during Typhoon Haishen in 2020

goods, and provide medical support, for example. Under the situation caused by COVID-19, this mission involved approximately 61,000 personnel in the affected area (approximately 350,000 personnel in total were involved in the activities), 270 aircraft, and approximately 13,000 vehicles. In total, approximately 1,468 people were rescued, and 8,400 people were provided with bathing facilities. In addition, the SDF transported rare breeds of pigs from isolated villages.

b. Disaster Relief in Response to Typhoon Haishen in 2020

(a) Evacuation Support Before Typhoons Approach

Under the situation caused by COVID-19, and after receiving a disaster relief request from the Kagoshima Prefecture Governor due to the approach of Typhoon Haishen, the Ground, Maritime and Air Self-Defense

Forces used eight CH-47 and UH-60 helicopters to transport a total of 200 elderly individuals, infants, and pregnant women who were living in Toshima Village to Kagoshima City.

(b) Disaster Relief in Response to Personnel Transport to Kitadaitojima Island

Under the situation caused by COVID-19, in September 2020, due to the impact from Typhoon Haishen, 60 buildings on Kitadaitojima Island lost power and civilian aircraft were unable to operate at Kitadaito Airport because of communications equipment malfunctions. Because of this, and after receiving a disaster relief request from the Okinawa Prefecture Governor, the GSDF transported 12 Okinawa Electric Power Company employees from Naha to Kitadaitojima Island in one CH-47 transport helicopter.

Video: Response to COVID-19
URL: <https://www.facebook.com/jointstaffpa/videos/285657902464800/>

Video: Introduction on protective measures of JSDF's standards (Washing hands)
URL: <https://youtu.be/5QXtgrUJnCM>

Video: Flyover by Blue Impulse to pay respect and gratitude to medical professionals handling COVID-19 infections
URL: <https://www.youtube.com/watch?v=tP6CFDQTrVs>

Video: Introduction on protective measures of JSDF's standards (Putting masks on/off)
URL: <https://youtu.be/F5TbW0G8NQs>

Video: Introduction on protective measures of JSDF's standards (Etiquette when coughing and sneezing)
URL: <https://youtu.be/4KWZ7bvj21M>

c. Disaster Relief to Prevent the Spread of Community-Acquired Infections of COVID-19

COVID-19 has become a global pandemic and is regarded as a serious security threat to the international community, including Japan. The MOD/SDF have made a variety of all-out efforts to prevent the spread of COVID-19.

From April 2020 to the end of March 2021, the SDF, in response to requests from prefectural governors, conducted disaster relief operations in 35 prefectures to prevent the spread of community-acquired infections of COVID-19. During these disaster relief operations, the SDF conducted capacity building to approximately 2,400 local government employees in 33 prefectures on preventing infection² emergency accommodation support to approximately 760 recovering patients in eight prefectures, transport support moving approximately 90 patients in six prefectures from hospitals to accommodation facilities, medical support in four prefectures, deployment/maintenance/management of tents necessary for outdoor PCR testing in one prefecture, transport in five prefectures of approximately 80 patients from outbreaks on remote islands, and dispatched the CT diagnostic vehicle owned by the SDF in one prefecture.



Medical support in response to the COVID-19 pandemic

d. Disaster Relief in Response to Bird Flu Outbreaks

From April 2020 to the end of March 2021, the SDF, in response to requests from the prefectural governors, culled poultry at poultry farms with outbreaks of bird flu in Kagawa Prefecture, Fukuoka Prefecture, Hyogo Prefecture, Miyazaki Prefecture, Nara Prefecture, Hiroshima Prefecture, Wakayama Prefecture, Okayama Prefecture, Chiba Prefecture, Toyama Prefecture, and Ibaraki Prefecture.

A total of about 34,000 personnel were dispatched to respond to these outbreaks.

e. Disaster Relief in Response to Classical Swine Fever (CSF) Outbreak

Between April 2020 and the end of March 2021, the occurrence of CSF was confirmed in Gunma and Mie



Support for the culling of birds, etc., in response to bird flu

Prefectures. As prompt epidemic prevention measures, including slaughter of pigs, were required, the SDF assisted with the slaughter and other measures in response to disaster relief requests from the governors of the prefectures.³ These missions engaged around 2,000 personnel.

f. Disaster Relief in Response to Forest Fire

From April 2020 to the end of March 2021, local authorities conducted firefighting operations against forest fires that broke out in Yamaguchi Prefecture, Tokyo, Gunma Prefecture, and Tochigi Prefecture, but they were unable to extinguish the fires despite their efforts. Based on requests issued by the governors of the prefectures, the SDF conducted aerial firefighting and other operations. The SDF dispatched about 3,100 personnel, about 280 vehicles, about 140 aircraft. Approximately 3,250 tons of water was used on 715 occasions.



Firefighting activities in response to forest fires

g. Disaster Relief in Response to Heavy Snow

(a) Disaster Relief in Response to Heavy Snow on the Kan-Etsu Expressway

In December 2020, heavy snow fell especially in Niigata Prefecture, and a maximum of 2,100 or more vehicles were stranded on some sections of the Kan-Etsu

² General order; includes education support provided via cooperation with other government agencies.

³ As a countermeasure to CSF outbreaks, the MOD/SDF cooperated with the Ministry of Agriculture, Forestry and Fisheries in aerial application of an oral vaccine for wild boars. The MOD/SDF carried out aerial application of the oral vaccine in the national forest in Nikko, Tochigi Prefecture in December 2019, and in Kiryu City in Gunma Prefecture and in Nikko City in Tochigi Prefecture in April 2020.

Fig. III-1-4-3 Record of Disaster Relief (FY2020)

Description	Number of dispatches	Total number of personnel working in the field	Total number of vehicles	Total number of aircraft	Total number of vessels
Responses to storm, flood, and earthquake disasters	10	4,709	846	25	
Transporting emergency patients	349	1,710	6	367	
Search and rescue	7	276	54	2	4
Assisting firefighting	33	3,208	313	143	
Other	131	48,925	6,913	30	
Total	530	58,828	8,132	567	4
July 2020 Heavy Rain	1	Number of personnel working in the field: approx. 61,000 Number of overall personnel: approx. 350,000	approx. 13,000	approx. 270	4

* Except for the Heavy Rain in July 2020.

* The number of overall personnel includes maintenance, communication, command, standby/back-up and other rear-service personnel in addition to personnel working in the field.

* The number of personnel involved in education support relating the COVID-19 is included in Other.

VOICE

Voices of a SDF Member Dispatched to Respond to COVID-19 Infections and His Wife

Captain NISHIDA Yutaro, Nursing Officer, NBC Countermeasure Medical Unit, GSDF (Setagaya Ward, Tokyo)

From April 3 to 28, 2020, I worked at Tokyo International Airport to collect specimens from PCR testing of Japanese nationals and others returning to Japan to prevent the spread of COVID-19 infections. I was worried about the risk of becoming infected myself with the invisible threat of the virus, but I was able to safely complete my duties thanks to the warm support of the airport staff, the presence of my trustworthy colleagues, and the results of my regular training.

I was dispatched for these activities for the first time since I started a family, so I had many concerns at first. I had to leave my wife and soon to be born son behind for about a month,

but the generous family support provided by the unit from the beginning of my dispatch allowed me to concentrate on my activities without worrying about my family. I am truly grateful to the airport staff, my colleagues who worked with me, and the unit that supported me.

NISHIDA Shiho, Wife of Captain NISHIDA

I was filled with anxiety about my husband's risk of coronavirus infection and his prolonged absence from home. However, thanks to the updates and careful explanations from the unit, I was able to wait for his return with peace of mind. I am very grateful. Thank you.



Preparation for specimens collection (author is second from the right)



Photograph of the Nishidas

VOICE

Voice of Personnel Member who Participated in Evacuation Support before the Approach of Typhoon Haishen in 2020

Lieutenant UEYAMA Naoto, Pilot, Kanoya Helicopter Detachment, Helicopter Patrol Squadron 22, MSDF (Kanoya City, Kagoshima Prefecture)

I am a pilot of UH-60J rescue helicopters operated by the Kanoya Helicopter Detachment, Helicopter Patrol Squadron 22, MSDF. In September 2020, the day before Typhoon Haishen came closest to Kagoshima Prefecture, I was informed that Kagoshima Prefecture had decided to evacuate the residents of Toshima Village from the island and had requested disaster relief. Although the situation was tense with the approaching typhoon, I approached my duties with the strong determination that the residents had to be evacuated off the island safely and quickly. I was relieved and felt a strong



The author and a UH-60J helicopter

sense of accomplishment when I saw young children and elderly people, who anxiously looked like they would start crying when we took off from Toshima Village, express their heartfelt relief when we landed safely in Kagoshima City. At the time, a total of seven helicopters (two MSDF helicopters, four GSDF helicopters, and one ASDF helicopter) were able to transport about 200 residents to Kagoshima City, and I feel a strong sense of pride in my unit that we were able to engage in such an important mission. There are many remote islands in Kagoshima Prefecture. In addition to emergency transport from remote islands, the SDF is often dispatched in the event of disasters such as typhoons. I will continue to train hard so that I can respond to all kinds of missions.



Transporting residents from Toshima Village (Takarajima)

Expressway. The SDF, after receiving a disaster relief request from the Niigata Prefecture Governor, distributed relief supplies such as water, food, fuel, and blankets, and also confirmed the safety of the individuals who were stranded.

(b) Disaster Relief in Response to Heavy Snow in Akita Prefecture and Niigata Prefecture

In January 2021, in Akita Prefecture and Niigata Prefecture, there was snow accumulation more than four times the normal amount and snow removal work was unable to keep up, causing many houses to collapse. The SDF, after receiving disaster relief requests from the Akita Prefecture Governor and from the Niigata Prefecture Governor, carried out snow removal operations and others, for wooden elementary and middle schools and the homes of elderly residents.

(c) Disaster Relief for the Hokuriku Expressway, etc.

Due to heavy snow from January 7, 2021, a large number of vehicles became stuck on some sections of the Hokuriku Expressway and the Tokai Hokuriku Expressway. The SDF, after receiving disaster relief requests from the Fukui Prefecture Governor and from the Toyama Prefecture Governor, removed snow around the stuck vehicles and distributed food and fuel, etc., to the drivers.

 See Reference 14 (Record of Disaster Relief [Past Five Years])

(2) Transportation of Emergency Patients

The SDF uses its aircraft to transport emergency patients from isolated islands and remote areas with insufficient medical facilities (transportation of emergency patients). In FY2020, out of a total of 531 cases of disaster relief, 349 cases involved the transportation of emergency



Video: Transport of emergency patients during Disaster Relief activities
URL: <https://youtu.be/VEnaFIUT4k>

Fig. III-1-4-4

Summary of Five-year Acceleration Measures for Disaster Prevention/Mitigation and National Resilience (MOD)

Name of measure	Details
Measures on materials and equipment for SDF air station facilities, etc.	To ensure enhanced infrastructure soundness, including air station facilities, etc. used by the SDF in various situations, including disasters, secure the stable operations of the SDF through medium- to long-term and continuous establishment of procurement of necessary materials and equipment needed in the refurbishment and utilization of air station facilities.
Measures to strengthen SDF infrastructure	In order to enhance the strength of infrastructure used by the SDF, including air station facilities and port facilities, in various situations including disasters, after conducting inspections, the SDF air stations and port facilities will be consistently enhanced with further facility functions on a medium- to long-term and continuous basis to ensure stable operations of the SDF.
Measures to strengthen SDF facility buildings, etc.	In order to maintain stability of SDF facilities that form the basis of unit operations, inspections will be implemented based on the three-year emergency measure, with projects that lead to enhanced disaster response performance, including earthquake-resistant measures and aging measures for buildings of SDF facilities.

patients, with dispatches to remote islands such as the Southwestern Islands (Okinawa and Kagoshima Prefectures), the Ogasawara Islands (Tokyo), and remote islands of Nagasaki Prefecture representing the majority of such cases.

In addition, the SDF carries out sea rescues upon requests by the Japan Coast Guard on such occasions as transport of emergency patients from vessels navigating areas of ocean far from the mainland where the aircraft of other organizations are unable to respond, due to reasons including a short flight range and emergencies of vessels due to incidents such as capsizing. Furthermore, the SDF conducts long-distance transportation for serious-case patients, by the ASDF transport aircraft C-130H utilizing its mobile medical units in certain occasions.

Furthermore, in FY2020, the SDF carried out 33 dispatches of firefighting support, with 25 cases responding to fire in the areas near SDF facilities.

(3) The MOD/SDF Response to Nuclear Disasters

In order to respond to nuclear disasters, the MOD/SDF has formulated “The SDF Nuclear Disaster Response Plan.” The SDF also participates in general nuclear disaster prevention drills jointly implemented by the government, local governments, and nuclear operators, to confirm the effectiveness of municipal governments’ evacuation plan and to strengthen cooperation with relevant agencies in a nuclear disaster emergency. Moreover, since October 2014, SDF personnel (three personnel of the GSDF, one personnel from the MSDF, and one personnel from the ASDF, for a total of five personnel as of March 31, 2021) were transferred (on temporary assignment) to a section in charge of nuclear disaster prevention within the Cabinet Office as part of an effort to enhance the effectiveness of nuclear disaster response capabilities.

(4) Formulating Plans for Responding to Various Disasters

In the event of the occurrence of various disasters, the MOD/SDF will take all possible measures such as swift transportation and deployment of sufficiently sized units in their initial response. By establishing a rotating staffing posture, the MOD/SDF is able to respond over the long-term. In doing so, the MOD/SDF will fully take into account the lessons learned from the Great East Japan Earthquake and other disasters.

The MOD/SDF formulates various contingency plans for responses to large-scale earthquakes, which are under consideration at the Central Disaster Management Council, based on the Ministry of Defense Disaster Prevention Plan to respond to such earthquakes.

(5) Exercises Involving the SDF

In order to respond to large-scale and various other disasters in a speedy and appropriate manner, the SDF carries out various disaster prevention drills, and also actively participates in disaster prevention drills organized by the Japanese Government or local governments and is seeking to ensure cooperation with various ministries and agencies, and local governments.

a. Joint Exercise for Rescue (JXR)

The SDF conducts disaster drills concerning its command and staff activities, and coordination between its major units and with organizations related to disaster prevention in the event of a large-scale earthquake to maintain and enhance the SDF’s earthquake response capability. In 2019, the SDF carried out training assuming the occurrence of an earthquake directly hitting the Tokyo area during the Tokyo 2020 Olympic and Paralympic Games.⁴

In March 2021, after discussing the issues and problems, etc., associated with the response to an earthquake directly hitting the Tokyo area during the Tokyo 2020 Olympic and Paralympic Games, the SDF held a training session in May to improve the effectiveness of its disaster response during the events.

⁴ On March 30, 2020, it was decided that the Tokyo 2020 Olympic and Paralympic Games will take place between July 23 and August 8, 2021, and between August 24 and September 5, 2021, respectively.

b. Tomodachi Rescue Exercise (TREX) Joint Disaster Response Exercise with U.S. Forces

In February 2021, joint exercises were held with U.S. Forces stationed in Japan in the scenario of the Nankai Trench earthquake. The purpose of the exercise was to maintain and enhance earthquake disaster relief capabilities in collaboration between the SDF and U.S. forces.

c. Remote Island Disaster Relief Exercise (RIDEX)

In September 2019, the SDF participated in general disaster prevention training planned and organized by Okinawa Prefecture and a disaster drill of Ishigaki citizens and conducted a field training exercise to deal with sudden largescale disasters in a remote island to maintain as well as enhance the SDF's ability to respond to disasters in remote islands and strengthen collaboration with relevant local authorities.

d. Drill for medical treatment activities following a large-scale earthquake

In September 2019, the SDF participated in a drill organized by the Cabinet Office for medical treatment activities following a large-scale earthquake. In this drill, the SDF practiced various activities for disaster relief and coordination with organizations related to disaster prevention to maintain and enhance the SDF's disaster response capability.

e. Other

They also took part in the Ministry of Defense Disaster Management Headquarters drill, the comprehensive disaster prevention drills on Disaster Prevention Day, and more.⁵


(6) Collaboration with Local Governments and Other Relevant Organizations

It is important for the MOD/SDF to strengthen collaboration with local governments and other relevant organizations under normal circumstances for the purpose of conducting disaster relief operations smoothly. For this reason, the SDF implements various measures including: (1) Assignment of the post of Liaison Officer for Civil Protection and Disaster Management (administrative official) at the SDF Provincial Cooperation Offices; (2) Temporary assignment of SDF officers to the department in charge of disaster prevention at the Tokyo Metropolitan Government, and mutual exchange between administrative officials of both the GSDF Middle Army and Hyogo Prefectural Government; and (3) Recommendation of retired SDF personnel with

knowledge in disaster prevention in accordance with requests from local governments.

As of the end of March 2021, as many as 612 retired SDF personnel are working in disaster prevention and other sections in 431 local governments in 46 prefectures throughout the country. Such cooperation in human resources is a very effective way of strengthening collaboration between the MOD/SDF and local governments, and its efficacy was confirmed through the experiences of the Great East Japan Earthquake and other disasters. In particular, each GSDF regional army establishes a forum for interaction with senior directors for crisis management and other officials from local governments, and shares information and exchanges opinions to strengthen collaboration with those local governments.

In the event of a disaster, liaison officers are sent quickly and effectively from the units to the local municipalities in order to ensure smooth coordination.

 **See** Reference 54 (Employment Situation of Retired Uniformed SDF Personnel in Disaster Prevention-related Bureaus in Local Government)

(7) Actions Based on the Five-Year Acceleration Measures for Disaster Prevention, Mitigation, and Building National Resilience

In December 2020, the five-year acceleration measures for disaster prevention, mitigation, and building national resilience⁶ were approved by the Cabinet. Under the measures, the MOD intensively focuses on measures for mechanical equipment materials, etc., at SDF airfield facilities and others, measures for enhancing the SDF's infrastructure, and measures for strengthening the SDF's buildings, etc., from the perspective of maintaining and strengthening functions including important infrastructure for disaster prevention.

3 Impact on Various Trainings due to Disaster Relief Activities

Large-scale and long-term disaster relief activities have been increasing in recent years, and originally planned training cannot be conducted during these disaster relief activities, which sometimes hinders the maintenance and improvements in unit training expected in training plans.


In the future, the MOD/SDF will make the utmost effort to respond to life-saving activities during the

⁵ In addition, the following drills were conducted and participated in, in 2019: (1) government tabletop drills, (2) the Nuclear Energy Disaster Prevention Drill, (3) the large tsunami disaster prevention drill, (4) a drill related to the Comprehensive Disaster Prevention Drill of Nine Prefectural and City Governments, (5) a drill related to the joint disaster drill among the Kinki prefectures, (6) comprehensive disaster prevention drills conducted by local governments or other bodies.

⁶ In recent years, the Heavy Rain in July 2018, Typhoon Jebi in 2018, the Hokkaido Eastern Iburi Earthquake in 2018 and other natural disasters caused function loss of important infrastructures necessary for living and economic activities of the people, including the occurrence of blackouts and closure of airport terminals, which had a major effect on the activities. Learning from the experience, the Emergency Countermeasures stipulate physical and non-physical measures that individual ministries and agencies should implement intensively for the period of three years from the perspective of maintaining functions including important infrastructure for disaster prevention and important infrastructure supporting the national economy and people's lives.

initial response, and with regards to the various types of emergency assistance, etc., the MOD/SDF will coordinate the role sharing, response guidelines, activity periods, and utilization of private companies, etc., with the relevant parties such as local governments and the relevant ministries and agencies. The posture will be shifted as needed, and activities will be carried out at an appropriate posture and scale.

For training that could not be conducted during disaster relief activities, the initial training plan will be reviewed after the disaster relief activities are concluded, and measures will be taken to conduct training at other opportunities. In doing so, the SDF will strive to maintain the unit's skills.

 See Part IV, Chapter 4, Section 1-1 (Improving the Proficiency of Troops), p. 468

2 Response to Rescue and Transport of Japanese Nationals Overseas, etc.

1 Basic Concept

In the event of natural disasters, insurgencies, and other emergencies overseas, the Minister of Defense can order SDF units to rescue or transport Japanese nationals and other people overseas upon request from the Minister for Foreign Affairs to guard, rescue or transport Japanese nationals overseas, etc., and upon subsequent consultations with the Minister, on the basis of the provisions of Article 84-3 (rescue Japanese nationals overseas, etc.) or Article 84-4 (transport of Japanese nationals overseas, etc.) of the SDF Law.

2 Initiatives of the MOD/SDF

For prompt and appropriate implementation of rescue or transport of Japanese nationals overseas, the SDF is prepared to dispatch its units swiftly. Specifically, the SDF maintains operational readiness, with the GSDF designating personnel to a helicopter unit and a unit responsible for land transportation, the MSDF designating vessels such as transport ships (including ship-based aircraft), and the ASDF designating airlift units and personnel for dispatch.

Since these activities require close coordination among the GSDF, MSDF and ASDF, the MOD/SDF constantly conducts joint exercises. From January to March 2020, the MOD/SDF also utilized the opportunity of the annual multilateral exercise Cobra Gold taking place in Thailand in a series of activities to protect Japanese nationals overseas in cooperation with the relevant ministries and the Embassy of Japan in Thailand. With the participation of Japanese nationals in Thailand, the exercise strengthened the collaboration between the MOD/SDF and the Ministry of Foreign Affairs. Furthermore, from November to December 2020, the SDF conducted an



Domestic training for the rescue of Japanese nationals overseas

exercise in Japan for the rescue of Japanese nationals overseas to practice the whole process of the actions and coordination with related organizations, in order to enhance integrated operational capabilities and to strengthen the coordination with the related organizations.

The MOD/SDF has conducted the transportation of Japanese nationals in four cases. Responding to the kidnapping of foreigners and Japanese in Iraq, 10 Japanese evacuated to Kuwait by an ASDF C-130H plane in April 2004. In January 2013, a government aircraft was deployed to bring seven Japanese nationals and the remains of a further nine nationals back to Japan following the kidnapping in Algeria. With respect to the terrorist attack in Dhaka, Bangladesh, which occurred in July 2016, the bodies of Japanese victims (seven nationals), their families, and other involved parties were transported to Japan by a government aircraft.

In relation to the deterioration of the situation in South Sudan in July of the same year, the ASDF transport aircraft C-130H transported four embassy staff from Juba to Djibouti.

 See Part II, Chapter 5, 3-6 (Rescue and Transportation of Japanese Nationals Overseas), p. 238

Section 5

SDF Activities since Enforcement of Legislation for Peace and Security

1 Promotion of Various Preparations for New Missions Based on the Legislation for Peace and Security

1 Promotion of Various Preparations

The Legislation for Peace and Security¹ was enforced in March 2016, and the MOD/SDF has undertaken various preparations for a variety of new missions based on the Legislation for Peace and Security, such as activities to raise awareness of legal systems and intra-unit rules that were established, education of SDF personnel, as well as development of educational materials necessary for the actual training of various units and the nurturing of instructors. In August 2016, as these preparations were all but completed, each unit of the SDF sets out to implement necessary training in connection with the Legislation for Peace and Security. Between Japan and the United States, and other bilateral and multilateral training, Japan started to conduct necessary training related to the Legislation for Peace and Security after coordinating with the countries concerned.

2 Key Training and Exercises

In July 2017, the SDF conducted the first exercise on the protection of U.S. vessels stipulated in SDF Law Article 95-2 with the intention to enhance the relationship with the U.S. Navy.

From July to August 2017, the SDF participated in the Multilateral Exercise Khaan Quest 17 to improve various capabilities through conducting exercises on the UN PKO, including the first overseas “protection of camps” and so-called “kaketsukekeigo” (coming to the aid of a geographically distant unit or personnel under attack), based on the International Peace Cooperation Act. In June 2018, moreover, the SDF participated in the Multilateral Exercise Khaan Quest 18 and conducted training related to the first overseas “safety-ensuring operations” based on the International Peace Cooperation Act. Also in June 2019, the

SDF participated in the Multilateral Exercise Khaan Quest 19 and conducted training related to “kaketsukekeigo.”

In September 2018 in Djibouti, and in Japan in December 2018, the SDF conducted a training on rescue of Japanese nationals overseas based on the provisions of SDF Law Article 84-3 to improve its joint operation capabilities and to strengthen cooperation with the relevant organizations.

Between January and February 2019, the SDF participated in the Multilateral Exercise Cobra Gold 19 and conducted training on the rescue of Japanese nationals overseas to improve its joint operation capabilities. In Command Post Exercise, the SDF also conducted activities including training on cooperation and support activities under the International Peace Support Act.

In December 2019, the SDF domestically conducted training on the rescue of Japanese nationals overseas. Moreover, between January and March 2020, the SDF participated in the Multilateral Exercise Cobra Gold 2020 and conducted training on the rescue of Japanese nationals overseas.

Furthermore, from November to December 2020, for the purposes of improving joint operation capabilities and strengthening cooperation with the SDF and the relevant ministries and agencies, the SDF conducted training at the Asaka Training Field and at the Hyakuri Base on the rescue of Japanese nationals overseas in coordination and collaboration with about 300 people from the relevant ministries and agencies, such as the Joint Staff, the Ground Component Command, the GSDF Eastern Army, Military Police units, the Air Defense Command, the Air Support Command, the Air Training Command, and the Air Materiel Command.

There, as exercises, they trained via (1) on-site activities for the advance research team, (2) a series of on-site activities for the joint dispatched force, and



Video: Training on the rescue of Japanese nationals overseas in FY2020

URL: <https://twitter.com/jointstaffpa/status/1335881038006894592>

¹ The Legislation for Peace and Security, which consists of the Act for the Development of Legislation for Peace and Security (Act Concerning Partial Amendments to the Self-Defense Forces Law and Other Existing Laws for Ensuring the Peace and Security of Japan and the International Community; Law No. 76 of 2015) and the International Peace Support Act (Act Concerning Cooperation and Support Activities to Armed Forces of Foreign Countries, etc., in Situations where the International Community is Collectively Addressing for International Peace and Security; Law No. 77 of 2015), came into force on March 29, 2016.


(3) cooperation with the relevant organizations and agencies. In addition, cooperation between the SDF and

the relevant ministries and agencies was conducted as command post training.

2 Track Record of Protection of Weapons and Other Equipment of the Units of the U.S. Forces and the Armed Forces of Other Countries (SDF Law Article 95-2)

In 2020, under SDF Law Article 95-2 (protection of weapons and other equipment of the units of the U.S. Forces and the armed forces of other countries), SDF vessels protected U.S. military vessels four times during ISR activities including ballistic missile alert, and SDF aircraft protected U.S. military aircraft 21 times during

bilateral/multilateral exercises resulting in 25 times of asset protection in total.

 See Part II, Chapter 5-3-7 (Protection of Weapons and Other Equipment of the Units of the U.S. Forces and the Armed Forces of Other Foreign Countries), p. 239


3 Other Efforts and Activities, etc.

In addition, based on the enforcement of the Legislation for Peace and Security, since April 2019 the MOD/SDF have dispatched staff officers to the Multinational Force and Observers (MFO) as Internationally Coordinated Operations for Peace and Security. In addition, for the engineering units deployed to the UN Mission in the Republic of South Sudan (UNMISS) from January 2012 to May 2017, it was decided to assign the duty of so-called “kaketsukekeigo” to the personnel in the 11th Engineering Unit to be deployed to UNMISS, as well as the duty of joint protection of camps. On November 15, 2016, the Cabinet approved the revision of the Implementation Plans for the International Peace Cooperation Assignment for UNMISS.

With regards to the Acquisition and Cross-Servicing Agreement (Japan-U.S. ACSA), following the passage of the Legislation for Peace and Security, the new Japan-

U.S. ACSA was signed in September 2016, ratified by the Diet in April 2017, and entered into force in April 2017. This has enabled the same framework as the existing Japan-U.S. ACSA, such as settlement procedures, to be applied to the provision from the SDF to the U.S. Forces of supplies and services that had become possible from the passage of the Legislation for Peace and Security.

In addition to the United States, the ACSA based on the Legislation for Peace and Security also came into effect for Australia, the United Kingdom, France, and Canada. Furthermore, the Japan-India ACSA was signed in September 2020 with India.

 See Chapter 2, Section 2-6 (Logistics Support), p. 317
Chapter 3, Section 5-1 (Frameworks for International Peace Cooperation Activities), p. 402
Chapter 3, Section 5-2 (Initiatives to Support UN PKO, etc.), p. 403

2020 marked the 60th anniversary of the signing of the Japan-U.S. Security Treaty. The National Defense Program Guidelines for FY2019 and beyond (NDPG) states that the Japan-U.S. Security Arrangements based on the Japan-U.S. Security Treaty, as well as Japan's own national defense architecture, constitute a cornerstone for Japan's national security, and that the Japan-U.S. Alliance, with the Japan-U.S. Security Arrangements as its core, plays a significant role for peace, stability and prosperity of not only Japan but also the Indo-Pacific region and the international community.

The NDPG also explains that, as inter-state competitions prominently emerge, it has become all the more important for Japan's national security to further strengthen its relationship with the United States, with whom Japan shares universal values and strategic interests, and that the United States also views that cooperation with its allies has become more important.

On that basis, the NDPG provides that, while the Japan-U.S. Alliance has been reinforced through

activities including those that were made possible by the Legislation for Peace and Security, Japan needs to further enhance the Alliance through efforts under the "Guidelines for Japan-U.S. Defense Cooperation" in order to achieve its national defense objective as the security environment surrounding Japan becomes more severe and uncertain at remarkably fast speeds.

At the same time, the NDPG provides that, in further strengthening the Japan-U.S. Alliance, it is an essential premise that Japan strengthens its own defense capability on its own accord and initiative. Fulfilling this premise, Japan needs to press ahead with efforts such as: bolstering the ability of the Alliance to deter and counter threats; enhancing and expanding cooperation in a wide range of areas; and steadily implementing measures concerning the stationing of the U.S. Forces in Japan (USFJ).

This chapter explains activities related to the enhancement of the Japan-U.S. Alliance while taking account of the concept of the NDPG.

Section 1

Outline of the Japan-U.S. Security Arrangements

1 Significance of the Japan-U.S. Security Arrangements

1 Maintenance of Japan's Peace and Security

In the current international community, a robust defense system capable of responding to every contingency, ranging from all types of armed attacks, including the use of nuclear weapons, to coercion or intimidation by military power, is necessary to secure the peace, security, and sovereignty of the nation.

However, it is difficult even for the United States to guarantee its security on its own. Much more than that, it would be difficult for Japan to ensure its national security solely through its unilateral efforts given its population, land, and economy. Moreover, such a strategy would not necessarily contribute to regional stability.

Consequently, Japan has maintained its peace and security, centered on the Security Arrangements with the world's dominant military power, the United States, with which it shares basic values such as democracy, respect for human rights, the rule of law, and a capitalist

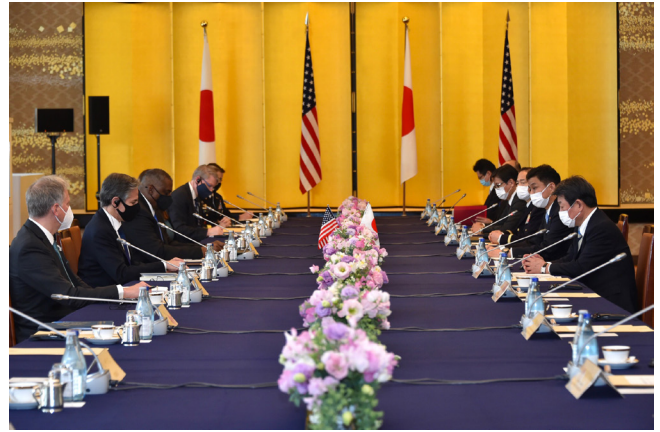
economy as well as an interest in maintaining the peace and security of the world, and has strong economic ties.

Specifically, Japan and the United States will take bilateral action in the event of an armed attack against Japan, based on the provisions of Article 5 of the Japan-U.S. Security Treaty, and Japan will provide facilities and areas for the U.S. Forces, based on the provisions of Article 6 of the treaty. If a nation plans to attack Japan, the attacker must be prepared to confront not only the defense capability of the Self-Defense Forces (SDF), but also the overwhelming military strength of the United States, due to the U.S. obligation to defend Japan in the event of an armed attack. As a result, the opposing nation clearly recognizes that it will suffer grievously if it carries out an invasion, and such desires will be abandoned at the planning stage. In other words, this serves as deterrence against attacks.

Japan intends to create a seamless posture and secure its peace and security by effectively utilizing the



President Biden and Prime Minister Suga attending the joint press conference at the Japan-U.S. summit meeting (April 2021) [Website of the Prime Minister's Office of Japan]



Defense Minister Kishi participating in the Japan-U.S. Security Consultative Committee (2+2) with U.S. Secretary of Defense Austin (March 2021)

deterrence capabilities of the U.S. military together with Japan's own national defense architecture.

2 Maintenance of Peace and Stability in the Region surrounding Japan

Article 6 of the Japan-U.S. Security Treaty states that contributing to the security of Japan and the maintenance of international peace and security in the Far East is the purpose of the use of facilities and areas by the USFJ. This provision is based on the recognition that the security of Japan is closely tied to the peace and security of the Far East region to which Japan belongs.

In the regions surrounding Japan, there are many states and the like with massive military power, including some states that retain nuclear weapons or continue nuclear development. In addition, uncertainty over the existing order is increasing due to changes in the balance of power. The so-called gray-zone situations harbor the risk of rapidly developing into graver situations without showing clear indications.

In such a security environment, the military presence of USFJ provides deterrence against unexpected contingencies caused by various security issues or destabilizing factors, not only protecting the interests of Japan and the United States but also providing a great sense of security to the nations in the region and thus fulfilling a role as public goods.

Also, the close bonds of cooperation based on the Japan-U.S. Security Arrangements constitute the foundation of the United States' commitment to the peace and stability of the region surrounding Japan. These arrangements, complemented by the alliances established between the United States and other countries in the region such as the Republic of Korea (ROK), Australia, Thailand, and the Philippines, and also by the friendly relations developed with other countries, play an indispensable role in maintaining the peace and stability of the region.

3 Responding to Global Issues

The Japan-U.S. Security Arrangements are the foundation for a comprehensive and friendly cooperative relationship between Japan and the United States, not only in defense but also in a wide range of areas, including politics, economy, and society.

The Japan-U.S. Alliance, with the Japan-U.S. Security Arrangements at its core, also forms the axis of Japan's foreign policy. It contributes to Japan's ability to implement positive efforts to maintain the peace and security of the international community, including the promotion of multinational security dialogue and cooperation, and cooperation with the United Nations.

Currently, we are confronted with global security challenges that are difficult for any single country to tackle alone, including risks concerning stable use of the seas, outer space and cyberspace, the acts of piracy, proliferation of weapons of mass destruction and ballistic missiles, and international terrorism, and it is important for countries to work together from peacetime. The strong bonds forged between Japan and the United States are also playing an important role in the efforts implemented by Japan to effectively respond to such challenges.

In particular, under the Japan-U.S. Security Arrangements, the SDF and the U.S. Forces are working together in peacetime in a variety of areas to strengthen their cooperation. This close coordination lays the foundation for various forms of global collaboration such as counter-piracy, undertaken by the SDF and the U.S. Forces, and leads to enhancement of the operational effectiveness of the Japan-U.S. Security Arrangements.

The peace and prosperity of the international community are closely linked to those of Japan. Accordingly, by advancing initiatives for resolving global issues in cooperation with the United States, which has remarkable operational capabilities, Japan will be able to further ensure its security and prosperity.

2 Content of the Guidelines for Japan-U.S. Defense Cooperation

The “Guidelines for Japan-U.S. Defense Cooperation” (the Guidelines), which show the general outline and policy direction of roles and cooperation between Japan and the United States, were formulated in 1978, and successively revised in 1997 and 2015.

The current Guidelines, which were revised in 2015, update the general framework and policy direction for the roles and missions of the two countries, as well as modernizing the Alliance. The Guidelines also manifest a strategic vision for a more robust Alliance and greater shared responsibilities by enhancing its deterrence and response capabilities in all phases, from peacetime to contingencies.

See Reference 16 (The Guidelines for Japan-U.S. Defense Cooperation [April 27, 2015])
 Fig. III-2-1-1 (Chronology of the Japan-U.S. Alliance)
 Fig. III-2-1-2 (Outline of the Guidelines for Japan-U.S. Defense Cooperation)

1 Strengthened Coordination within the Alliance

(1) Establishment of the Alliance Coordination Mechanism (ACM)

In November 2015, the Japanese and U.S. Governments established the ACM in order to seamlessly and effectively address any situation that affects Japan’s peace and security or any other situation that may require an Alliance response.

Based on the framework shown in Fig. III-2-1-3, the ACM coordinates policy and operational aspects related to activities conducted by the SDF and the U.S. Forces in all phases from peacetime to contingencies. This mechanism also contributes to timely information sharing as well as to the development and maintenance of common situational awareness.

The characteristics of the mechanism include that (1) it is the standing mechanism utilizable from peacetime; (2) it can be utilized for large-scale natural disasters in Japan as well as for cooperation in the Indo-Pacific region and globally; and (3) it enables

Fig. III-2-1-1 Chronology of the Japan-U.S. Alliance

1951		The former Japan-U.S. Security Treaty is signed
1952	Years of the former Japan-U.S. Security Treaty	The treaty enters into force
1958		Fujiyama-Dulles Talks (agreement on the revision of the treaty)
1960	Revision of Japan-U.S. Security Treaty and the new Japan-U.S. Security Treaty	The new Japan-U.S. Security Treaty is signed and enters into force
1968		(Ogasawara Islands are returned to Japan)
1969		Sato-Nixon Talks (agreement on the renewal of the Japan-U.S. Security Treaty and the return of Okinawa to Japan)
1972		(Okinawa is returned to Japan)
1976	Formulation of the 1978 Guidelines and expanding Japan-U.S. defense cooperation	(Agreement on the establishment of the Sub-Committee-Committee for U.S.-Japan Defense Cooperation)
1978		Formulation of the 1978 Guidelines for Japan-U.S. Defense Cooperation (1978 Guidelines)
1991		(Collapse of the USSR and the end of the Cold War)
1996	End of the Cold War and the establishment of the 1997 Guidelines	Japan-U.S. Joint Declaration on Security (Hashimoto-Clinton talks)
1997		SACD Final Report
1997		Formulation of the 1997 Guidelines for Japan-U.S. Defense Cooperation (1997 Guidelines)
2001		9/11 terrorist attacks in the U.S.
2003		The Japan-U.S. Alliance in the global context (Koizumi-Bush Talks)
2006	Japan-U.S. relations since the 9/11 terrorist attacks in the United States	Formulation of the United States-Japan Roadmap for Realignment Implementation
		The Japan-U.S. Alliance of the New Century (Koizumi-Bush Talks)
		The Japan-U.S. Alliance for the World and Asia (Abe-Bush Talks)
2007		Irreplaceable Japan-U.S. Alliance (Abe-Bush Talks)
2010		50th anniversary of the conclusion of the Japan-U.S. Security Treaty
2012		Japan-U.S. Joint Statement: A Shared Vision For the Future (Noda-Obama Talks)
2013		Agreement on the revision of the Guidelines for Japan-U.S. Defense Cooperation
2014		The United States and Japan: Shaping the Future of the Asia-Pacific and Beyond (Abe-Obama Talks)
2015	New security environment and the establishment of the new Guidelines	Formulation of the New Guidelines for Japan-U.S. Defense Cooperation
		Japan-U.S. Joint Vision Statement (Abe-Obama Talks)
2017		Joint Statement (Abe-Trump Talks)
2018		Joint Statement (Abe-Trump Talks)
2020		60th anniversary of the conclusion of the Japan-U.S. Security Treaty
2021		Joint Statement (Suga-Biden Talks)

Fig. III-2-1-2 Outline of the Guidelines for Japan-U.S. Defense Cooperation

Item	Outline																		
I. Defense Cooperation and the Aim of the Guidelines	<p>The Guidelines provide the general framework and policy direction for the roles and missions of Japan and the United States, as well as ways of cooperation and coordination.</p> <p>In this way, the Guidelines promote domestic and international understanding of the significance of the Japan-U.S. Alliance.</p> <p>○ By means of the Japan-U.S. bilateral security and defense cooperation, the following points will be emphasized:</p> <ul style="list-style-type: none"> – seamless, robust, flexible, and effective bilateral responses; – synergy across the two governments' national security policies; – a whole-of-government Alliance approach; – cooperation with regional and other partners, as well as international organizations; and – the global nature of the Japan-U.S. Alliance. 																		
II. Basic Premises and Principles	<p>A The rights and obligations under the Japan-U.S. Security Treaty and its related arrangements, will remain unchanged.</p> <p>B All actions and activities undertaken by Japan and the United States under the Guidelines will be consistent with international law.</p> <p>C All actions and activities undertaken by Japan and the United States will be in accordance with their respective constitutions, laws, and regulations. Japan will conduct actions and activities in accordance with its basic positions, such as the maintenance of its exclusively national defense-oriented policy and its three non-nuclear principles.</p> <p>D The Guidelines do not obligate either government to take legislative, budgetary, administrative, or other measures. However, the two governments are expected to reflect in an appropriate way the results of these efforts, in their specific policies and measures.</p>																		
III. Strengthened Alliance Coordination	<p>Effective bilateral cooperation under the Guidelines will <u>require the two governments to conduct close, consultative dialogue and sound policy and operational coordination from peacetime to contingencies. For this purpose, the two governments will establish a new, standing Alliance Coordination Mechanism, enhance operational coordination, and strengthen bilateral planning.</u></p> <p>A Alliance Coordination Mechanism</p> <p>In order to address issues seamlessly and effectively any situation that affects Japan's peace and security or any other situation that may require an Alliance response, the two governments will utilize the Alliance Coordination Mechanism, and will strengthen policy and operational coordination related to activities conducted by the SDF and the United States Armed Forces in all phases from peacetime to contingencies. The two governments will establish necessary procedures and infrastructure (including facilities as well as information and communication systems) and conduct regular training and exercises.</p> <p>B Enhanced Operational Coordination</p> <p>The two governments recognize the importance of collocating operational coordination functions. The SDF and the United States Armed Forces will exchange personnel to ensure robust information sharing, to facilitate coordination and to support international activities.</p> <p>C Bilateral Planning</p> <p>In peacetime, the two governments will develop and update bilateral plans through the Bilateral Planning Mechanism. Bilateral plans are to be reflected appropriately in the plans of both governments.</p>																		
IV. Seamlessly Ensuring Japan's Peace and Security	<ul style="list-style-type: none"> ● The two governments will take measures to seamlessly ensure Japan's peace and security in all phases from peacetime to contingencies, including situations when an armed attack against Japan is not involved. In this context, the two governments also will promote further cooperation with partners. ● The two governments will utilize the Alliance Coordination Mechanism as appropriate, for assessment of the situation, sharing of information, as well as flexible deterrent options and actions aimed at de-escalation. The two governments also will coordinate strategic messaging through appropriate channels. <p>A Cooperative Measures during Peacetime</p> <ul style="list-style-type: none"> • The two governments will promote cooperation across a wide range of areas, to strengthen the deterrence and capabilities of the Japan-U.S. Alliance. • The SDF and the United States Armed Forces will enhance interoperability, readiness, and vigilance. To these ends, the two governments will take measures, including, but not limited to: (1) Intelligence, Surveillance, and Reconnaissance; (2) Air and Missile Defense; (3) Maritime Security; (4) Asset Protection; (5) Training and exercises; (6) Logistic Support; and (7) Use of Facilities. <p>B Responses to Emerging Threats to Japan's Peace and Security</p> <ul style="list-style-type: none"> • The Alliance will respond to situations that will have an important influence on Japan's peace and security. Such situations cannot be defined geographically. The measures described in this section include those that may be taken, in accordance with the two countries' respective laws and regulations, in circumstances that have not yet amounted to such a situation. • In addition to continuing cooperative measures during peacetime, the two governments will pursue all avenues. Utilizing the Alliance Coordination Mechanism, the two governments will take additional measures, based on their own decisions, including, but not limited to: (1) Noncombatant Evacuation Operations; (2) Maritime Security; (3) Measures to Deal with Refugees; (4) Search and Rescue; (5) Protection of Facilities and Areas; (6) Logistics Support; and (7) Use of Facilities. <p>C Actions in Response to an Armed Attack against Japan</p> <p>Bilateral actions remain a core aspect of Japan-U.S. security and defense cooperation.</p> <p>1 When an Armed Attack against Japan is Anticipated</p> <p>The two governments will take measures to deter an armed attack and to de-escalate the situation, while making preparations necessary for the defense of Japan.</p> <p>2 When an Armed Attack against Japan Occurs</p> <ul style="list-style-type: none"> • Principles for Coordinated Actions <p>The two governments will take appropriate and coordinated actions to promptly repel the attack and deter any further attacks. The SDF will have primary responsibility to conduct defensive operations, and the United States Armed Forces will support and supplement the SDF.</p> <ul style="list-style-type: none"> • Concept of Operations <table border="1"> <thead> <tr> <th></th> <th style="background-color: #FFD700;">Self-Defense Forces (SDF)</th> <th style="background-color: #0056B3; color: white;">United States Armed Forces</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Operations to Defend Airspace</td> <td>Conduct bilateral operations to defend airspace above and surrounding Japan</td> <td></td> </tr> <tr> <td>Have primary responsibility for conducting air defense operations while ensuring air superiority</td> <td>Conduct operations to support and supplement SDF operations</td> </tr> <tr> <td rowspan="2">Operations to Counter Ballistic Missile Attacks</td> <td>Conduct bilateral operations to counter ballistic missile attacks against Japan</td> <td></td> </tr> <tr> <td>Have primary responsibility for conducting ballistic missile defense operations to defend Japan</td> <td>Conduct operations to support and supplement SDF operations</td> </tr> <tr> <td rowspan="2">Operations to Defend Maritime Areas</td> <td>Conduct bilateral operations to defend waters surrounding Japan and to secure the safety of sea lines of communication</td> <td></td> </tr> <tr> <td>Have primary responsibility for the protection of major ports and straits in Japan and of ships and vessels in waters surrounding Japan and for other associated operations</td> <td>Conduct operations to support and supplement SDF operations</td> </tr> </tbody> </table>		Self-Defense Forces (SDF)	United States Armed Forces	Operations to Defend Airspace	Conduct bilateral operations to defend airspace above and surrounding Japan		Have primary responsibility for conducting air defense operations while ensuring air superiority	Conduct operations to support and supplement SDF operations	Operations to Counter Ballistic Missile Attacks	Conduct bilateral operations to counter ballistic missile attacks against Japan		Have primary responsibility for conducting ballistic missile defense operations to defend Japan	Conduct operations to support and supplement SDF operations	Operations to Defend Maritime Areas	Conduct bilateral operations to defend waters surrounding Japan and to secure the safety of sea lines of communication		Have primary responsibility for the protection of major ports and straits in Japan and of ships and vessels in waters surrounding Japan and for other associated operations	Conduct operations to support and supplement SDF operations
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	Operations to Counter Ground Attacks	Conduct bilateral operations to counter ground attacks against Japan by ground, air, maritime, or amphibious forces Have primary responsibility to prevent and repel ground attacks, including those against islands, and have primary responsibility for conducting air defense operations while ensuring air superiority	Conduct operations to support and supplement SDF operations									
	Cross-domain Operations	Conduct bilateral operations across domains to repel an armed attack against Japan and to deter further attacks										
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V. Cooperation for Regional and Global Peace and Security	<ul style="list-style-type: none"> Operational Support Activities The Guidelines identify the following operational support activities: (1) Communications and Electronics; (2) Search and Rescue; (3) Logistic Support; (4) Use of Facilities; and (5) Chemical, Biological, Radiological, and Nuclear (CBRN) Protection.											
	D Actions in Response to an Armed Attack against a Country other than Japan <ul style="list-style-type: none"> When Japan and the United States decide to take actions involving the use of force in accordance with international law, including full respect for sovereignty, and with their respective Constitutions and laws to respond to an armed attack against the United States or a third country, and Japan has not come under an armed attack, they will cooperate closely to respond to the armed attack and to deter further attacks. The SDF will conduct appropriate operations involving the use of force to respond to situations where an armed attack against a foreign country that is in a close relationship with Japan occurs and as a result, threatens Japan's survival and poses a clear danger to overturn fundamentally its people's right to life, liberty, and the pursuit of happiness, to ensure Japan's survival, and to protect its people. Examples of cooperative operations are: (1) Asset Protection; (2) Search and Rescue; (3) Maritime Operations; (4) Operations to Counter Ballistic Missile Attacks; and (5) Logistics Support. E Cooperation in Response to a Large-scale Disaster in Japan <ul style="list-style-type: none"> When a large-scale disaster takes place in Japan, Japan will have primary responsibility for responding to the disaster. The SDF, in cooperation with relevant agencies, local governments, and private actors, will conduct disaster relief operations. The United States, in accordance with its own criteria, will provide appropriate support for Japan's activities. The two governments will coordinate activities through the Alliance Coordination Mechanism, as appropriate. The two governments will work together closely, including through information sharing. The United States Armed Forces may participate in disaster-related drills, which will increase mutual understanding in responding to large-scale disasters. 											
VI. Space and Cyberspace Cooperation	<ul style="list-style-type: none"> In an increasingly interconnected world, Japan and the United States will take a leading role in cooperation with partners to provide a foundation for peace, security, stability, and economic prosperity in the Asia-Pacific region and beyond. When each of the two governments decides to participate in international activities, the two governments will cooperate closely with each other and with partners, as appropriate, such as in the activities described below. A Cooperation in International Activities <ul style="list-style-type: none"> The two governments will participate in international activities, based on their own judgment. When working together, the SDF and the United States Armed Forces will cooperate to the maximum extent practicable. Common areas for cooperation will include: (1) Peacekeeping Operations; (2) International Humanitarian Assistance/Disaster Relief; (3) Maritime Security; (4) Partner Capacity Building; (5) Noncombatant Evacuation Operations; (6) Intelligence, Surveillance, and Reconnaissance; (7) Training and Exercises; and (8) Logistics support. B Trilateral and Multilateral Cooperation <p>The two governments will promote and improve trilateral and multilateral security and defense cooperation. The two governments also will work together to strengthen regional and international institutions with a view to promote cooperation based upon international law and standards.</p>											
	A Cooperation on Space <ul style="list-style-type: none"> The two governments will maintain and strengthen their partnership to secure the responsible, peaceful, and safe use of space. The two governments will ensure the resiliency of their space systems and enhance space situational awareness cooperation. The SDF and the United States Armed Forces will continue to cooperate in such areas as early-warning, ISR, positioning, navigation and timing, space situational awareness, meteorological observation, command, control, and communications. B Cooperation on Cyberspace <ul style="list-style-type: none"> The two governments will share information on threats and vulnerabilities in cyberspace in a timely and appropriate manner. The two governments will cooperate to protect critical infrastructure and the services upon which the SDF and the United States Armed Forces depend to accomplish their missions. The SDF and the United States Armed Forces will maintain posture to monitor their respective networks and systems, conduct educational exchanges, ensure the resiliency of their respective networks and systems, contribute to all Japanese and U.S. government efforts, and conduct bilateral exercises. In the event of cyber incidents against Japan, Japan will have primary responsibility to respond, and the United States will provide appropriate support to Japan. In the event of serious cyber incidents that affect the security of Japan, the two governments will consult closely and take appropriate cooperative actions to respond. 											
VII. Bilateral Enterprise	The two governments will develop and enhance the following areas as a foundation of security and defense cooperation, in order to improve further the effectiveness of bilateral cooperation: <ul style="list-style-type: none"> A Defense Equipment and Technology Cooperation B Intelligence Cooperation and Information Security C Educational and Research Exchanges 											
VIII. Processes for Review	Regular evaluations will be conducted on whether the Guidelines remain adequate in light of the evolving circumstances, and the two governments will update the Guidelines in a timely and appropriate manner if deemed necessary.											



Defense Minister Kono meeting with U.S. Secretary of Defense Esper (August 2020)

the United States have been utilizing the mechanism to coordinate closely, including in response to the Kumamoto Earthquake, the ballistic missile launches by North Korea, and Chinese activities in the waters and airspace around the Senkaku Islands.

Fig. III-2-1-3 (The Framework of Alliance Coordination Mechanism [ACM])

(2) Enhanced Operational Coordination

Based on the Guidelines, the Japanese and U.S. Governments recognize the importance of collocating operational coordination functions. The SDF and the U.S. Forces will exchange personnel to ensure robust information sharing, to facilitate coordination and to support international activities.

(3) Establishment of the Bilateral Planning Mechanism (BPM)

Based on the Guidelines, the Japanese and U.S. Governments established the BPM in November 2015 for the purpose of implementing the development of bilateral plans in peacetime in line with the Guidelines in order to enable effective bilateral responses to contingencies relevant to Japan's peace and security.

In the development of bilateral plans, this mechanism performs the functions of ensuring Ministerial-level directions and supervision and the involvement of

whole-of-government coordination while ensuring the involvement of relevant Japanese and U.S. organizations. These characteristics enable the Japanese and U.S. Governments to respond appropriately and promptly when the need for coordination arises. For example, in the event of a largescale natural disaster in Japan, it would require a diversity of coordination in the policy and operational aspects related to activities of the SDF and the U.S. Forces. The utilization of this mechanism makes it possible to conduct close and appropriate coordination with the involvement of relevant Japanese and U.S. organizations at various levels.

Since the establishment of the mechanism, Japan and

Fig. III-2-1-3 The Framework of Alliance Coordination Mechanism (ACM)

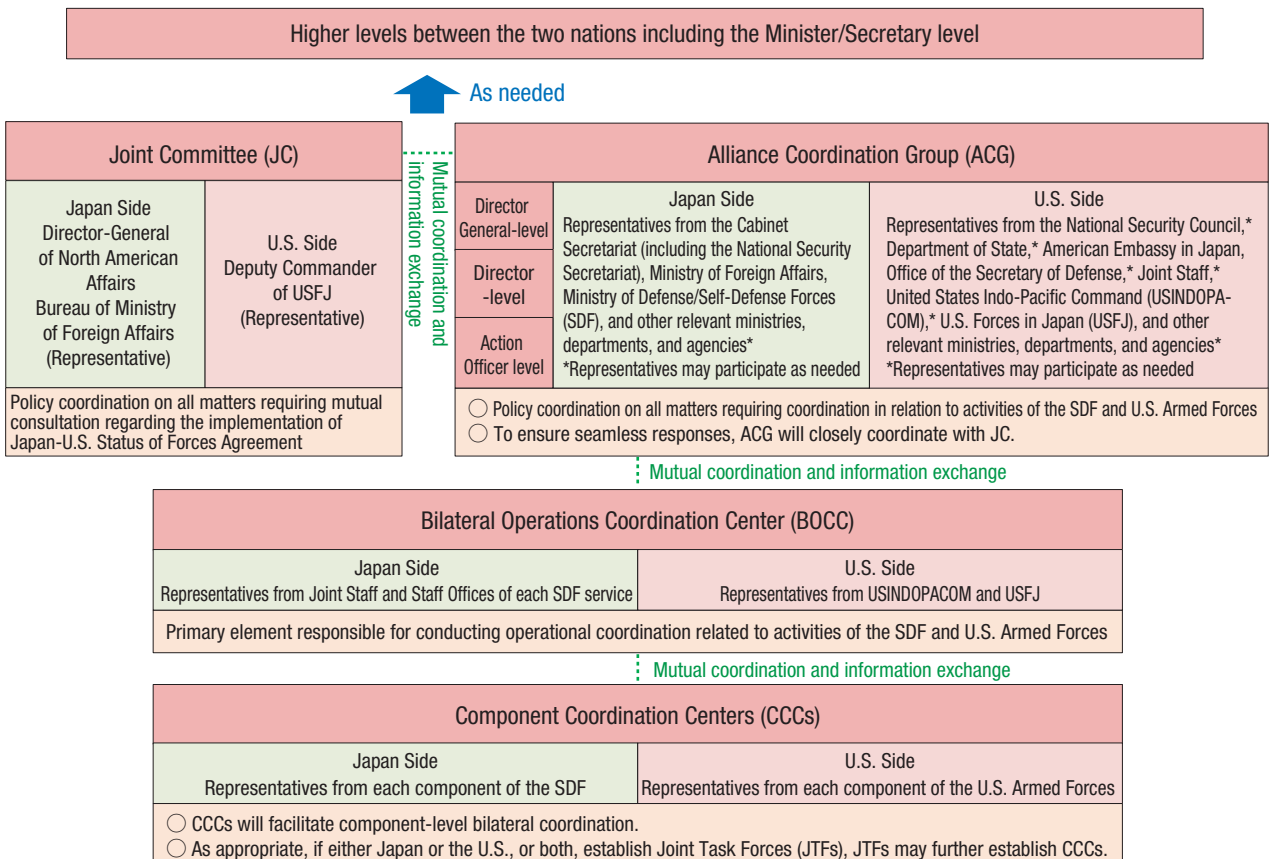
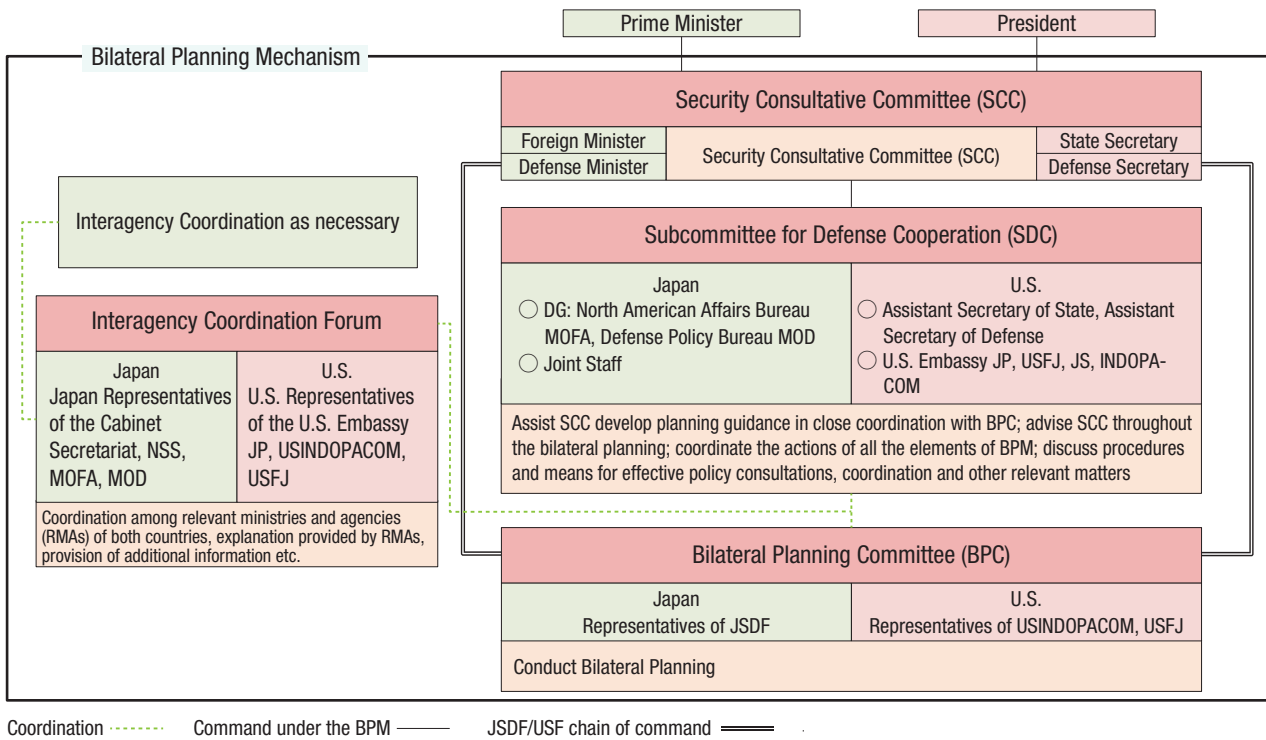


Fig. III-2-1-4 The Framework of the Bilateral Planning Mechanism (BPM)



Chapter 2
Japan-U.S. Alliance

relevant government ministries and agencies, as well as conducting coordination for various forms of Japan-U.S. cooperation conducive to the development of bilateral plans. The two governments will conduct bilateral planning through this mechanism.

See Fig. III-2-1-4 (The Framework of the Bilateral Planning Mechanism [BPM])

2 Strengthening Japan-U.S. Defense Cooperation

The Guidelines define that Japan and the United States will work on a variety of measures from peacetime, including ISR activities, air and missile defense, maritime security, training and exercises, asset protection, and logistics

support, and cooperate in such activities as response to a large-scale disaster in Japan to seamlessly ensure Japan’s peace and security.

The Guidelines also require both countries: to cooperate in international activities and promote and improve trilateral and multilateral cooperation for regional and global peace and security; to make cooperation on space and cyberspace; and to develop and enhance bilateral enterprise through defense equipment and technology cooperation as well as intelligence cooperation and information security for further improving the effectiveness of bilateral cooperation.

See Section 2 (Strengthening Ability of Japan-U.S. Alliance to Deter and Counter Threats), p. 314
Section 3 (Strengthening and Expanding Cooperation in a Wide Range of Areas), p. 320



Joint press conference by Chief of Staff Yamazaki and U.S. Forces Japan Commander Schneider during the Japan-U.S. Bilateral Joint Field Training Exercise (FTX) “Keen Sword 21” (October 2020)

3 Policy Consultations between Japan and the United States

Japan and the United States have maintained close coordination at multiple levels, including the summit level and ministerial level, and have continually strengthened and expanded cooperative relations for the peace, stability and prosperity of not only the two countries but also the entire international community, including the Indo-Pacific region.

Close policy consultations on security are conducted through diplomatic channels as well as between officials in charge of defense and foreign affairs at multiple levels in the Governments of Japan and the United States through meetings such as the Japan-United States SCC (“2+2” Meeting), the SSC and the Subcommittee for Defense Cooperation (SDC). As the framework for ministerial consultations among the top officials in charge of defense and foreign affairs of the two countries, the SCC (“2+2” Meeting) represents such policy consultations. The SCC functions as an important consultative panel to discuss issues related to Japan-U.S. cooperation in the area of security.

In addition, the Ministry of Defense (MOD) organizes Japan-U.S. defense ministerial meetings between the Japanese Minister of Defense and the U.S. Secretary of Defense as necessary where discussions are made with a focus on the defense policies of the respective governments and defense cooperation. Furthermore, the Japanese State Minister of Defense and the U.S. Deputy Secretary of Defense work together, and MOD officials, including the Administrative Vice-Minister of Defense, the Chief of Staff of the Joint Staff, the Vice-Minister of Defense for

International Affairs, and the Chiefs of Staff of the SDF, have working-level meetings when necessary and exchange information with the U.S. Department of Defense (DoD) and others under the Japan-U.S. Security Arrangements.

The sharing of information and views at every opportunity and level between Japan and the United States is undoubtedly conducive to the increased credibility of the Japan-U.S. Security Arrangements, and results in the further enhancement of close collaboration between the two countries. Therefore, the MOD is proactively engaging in these initiatives.

See Reference 17 (Japan-U.S. [Minister-Level] Consultations [Since 2018])

Reference 18 (Joint Statement of the U.S.-Japan Security Consultative Committee [2+2] [March 16, 2021])

Fig. III-2-1-5 (Major Consultations on Policies Held between Japanese and U.S. Government Officials concerning Japan-U.S. Security Issues)

Fig. III-2-1-6 (Recent Japan-U.S. Bilateral Meetings)



Defense Minister Kishi meets with U.S. Secretary of Defense Austin (March 2021)

Fig. III-2-1-5 Major Consultations on Policies Held between Japanese and U.S. Government Officials concerning Japan-U.S. Security Issues

Consultative Forum	Participants		Purpose	Legal Basis
	Japanese Side	U.S. Side		
Security Consultative Committee (SCC) (“2+2” Meeting)	Minister for Foreign Affairs, Minister of Defense	U.S. Secretary of State, U.S. Secretary of Defense ¹	Study of matters which would promote understanding between the Japanese and U.S. Governments and contribute to the strengthening of cooperative relations in the areas of security, which form the basis of security and are related to security	Established on the basis of letters exchanged between the Prime Minister of Japan and the U.S. Secretary of State on January 19, 1960, in accordance with Article IV of the Japan-U.S. Security Treaty
Security Subcommittee (SSC)	Participants are not specified ²	Participants are not specified ²	Exchange of views on security issues of mutual concern to Japan and the United States	Article IV of the Japan-U.S. Security Treaty and others
Subcommittee for Defense Cooperation (SDC) ³	Director-General of North American Affairs Bureau, Ministry of Foreign Affairs; Director General of the Bureau of Defense Policy, Ministry of Defense; Representative from Joint Staff	Assistant Secretary of State, Assistant Secretary of Defense, Representative from: the U.S. Embassy in Japan, USFJ, Joint Staff, USINDOPACOM	Study and consideration of consultative measures to Japan and the United States including guidelines to ensure consistent joint responses covering the activities of the SDF and USFJ in emergencies	Established on July 8, 1976, as a subentry under the Japan-U.S. Security Consultative Committee in its 16th meeting reorganized at the Japan-U.S. vice-ministerial consultation on June 28, 1996
Japan-U.S. Joint Committee	Director-General of North American Affairs Bureau, Ministry of Foreign Affairs; Director General of the Bureau of Local Cooperation, Ministry of Defense; and others	Deputy Commander of USFJ, Minister at the U.S. Embassy, and others	Consultation concerning implementation of the Status of Forces Agreement	Article XXV of the Status of Forces Agreement

Notes: 1. The U.S. side was headed by the U.S. Ambassador to Japan and the Commander-in-Chief of the U.S. Pacific Command before December 26, 1990.

2. Meetings are held from time to time between working-level officials of the two Governments, such as officials corresponding in rank to vice-minister or assistant secretary.

3. A Council of Deputies consisting of Deputy-Director General and Deputy Assistant Secretaries was established when the SDC was recognized on June 28, 1996.

Fig. III-2-1-6 Recent Japan-U.S. Bilateral Meetings

Date	Meeting/Venue	Participants	Summary of the outcome
August 7, 2019	Japan-U.S. Defense Ministerial Meeting / Tokyo	Then Minister of Defense Iwaya U.S. Secretary of Defense Esper	<ul style="list-style-type: none"> The Ministers confirmed the importance of full implementation of the United Nations Security Council Resolutions for a complete, verifiable and irreversible dismantlement of all North Korea's WMD and ballistic missiles of all ranges. The Ministers confirmed that they will closely coordinate in their efforts to be made based on the strategy documents of both countries and to even strengthen the alliance capability to deter and respond.
August 25, 2019	Japan-U.S. Summit Meeting / Biarritz	Prime Minister Abe President Trump	<ul style="list-style-type: none"> The leaders reaffirmed the recognition that the Japan-U.S. Alliance is stronger than ever before as a result of the active mutual visits between the two leaders. The leaders shared the view on continuing to further strengthen the unwavering Japan-U.S. Alliance. The leaders confirmed that Japan and the United States will continue to cooperate closely toward the resolution of issues of concern regarding North Korea, including the abductions, nuclear and missile issues.
September 25, 2019	Japan-U.S. Summit Meeting / New York	Prime Minister Abe President Trump	<ul style="list-style-type: none"> The leaders reaffirmed the recognition that the Japan-U.S. Alliance is stronger than ever before, and shared the view on continuing to further strengthen the unwavering Japan-U.S. Alliance. The leaders exchanged views on the situation on North Korea, including issues of concern such as the abductions, nuclear, and missiles issues, and confirmed that Japan and the United States, as well as Japan, the United States, and the Republic of Korea would continue to closely cooperate on these issues. The leaders shared the view that Japan and the United States would continue to cooperate toward easing tensions and stabilizing the situation in the Middle East. The two leaders strongly criticized the recent attacks on the crude oil facilities in Saudi Arabia. Prime Minister Abe stated that in light of the capabilities of the Houthis it was difficult to conclude that these attacks had been carried out by the Houthis, while Japan has been undertaking information gathering and analysis to evaluate this incident, and would continue to work together with the countries concerned, including the United States. Prime Minister Abe said that he had called on President Rouhani to ensure that Iran exercised self-restraint to ease the situation and to ensure that Iran exercised its influence constructively. Prime Minister Abe also said that he intended to work closely with the United States to bring about peace and stability in the Middle East.
November 18, 2019	Japan-U.S. Defense Ministerial Meeting / Bangkok	Minister of Defense Kono U.S. Secretary of Defense Esper	<ul style="list-style-type: none"> The ministers confirmed that the recent series of ballistic missile launches by North Korea are a serious threat to regional security. The Ministers confirmed the importance of full implementation of the United Nations Security Council Resolutions for a complete, verifiable and irreversible dismantlement of all North Korea's WMDs and ballistic missiles of all ranges. The Ministers affirmed their position that they oppose unilateral attempts to change the status-quo by coercion in the East and South China Seas, and that it is important to work together to make sure that Rule of Law and Freedom of Navigation are firmly established. The Ministers confirmed that they continue to closely work together to even strengthen the alliance capability to deter and respond, including promotion of bilateral cooperation in new domains, to materialize aligned strategies of both countries. The Ministers reaffirmed the significance of cooperation with various partners including conducting joint exercises and capacity building assistance to maintain and strengthen a Free and Open Indo-Pacific with the Japan-U.S. Alliance being the cornerstone. The Ministers reaffirmed that it is important to sustain the operational readiness of the U.S. Forces in Japan, and Japan and the U.S. continue to work together with the shared recognition that understanding and cooperation from local communities is crucial for maintenance of the operational readiness.
January 14, 2020	Japan-U.S. Defense Ministerial Meeting / Washington D.C.	Minister of Defense Kono U.S. Secretary of Defense Esper	<ul style="list-style-type: none"> The Ministers exchanged views on the regional situation in the Middle East. Minister of Defense Kono explained the cabinet decision to send the SDF to the Middle East. The Ministers confirmed that repeated ballistic missile launches by North Korea are a serious challenge not only to Japan but also to the international community. The Ministers confirmed the importance of full implementation of the UN Security Council Resolutions for a complete, verifiable and irreversible dismantlement of all North Korea's WMD and ballistic missiles of all ranges. The Ministers agreed that Japan and the United States will continue working together with partner countries to counter illicit "ship-to-ship" transfers of goods by North Korea. The Ministers welcomed that the Japan-U.S. Alliance has become stronger than ever before and confirmed that they continue to closely work together to further strengthen the Alliance capability to deter and respond, and materialize aligned strategies of both countries'. The Ministers reaffirmed the significance of cooperation with various partners including conducting joint exercises and capacity building assistance with the Japan-U.S. Alliance being the cornerstone. The ministers welcomed the recent progress made by the Japanese Government in acquisition of Mageshima, a candidate site for a permanent FCLP facility, and confirmed to work closely together for the steady implementation of the U.S. forces realignment initiatives.
August 29, 2020	Japan-U.S. Defense Ministerial Meeting / Guam	Minister of Defense Kono U.S. Secretary of Defense Esper	<ul style="list-style-type: none"> The Ministers affirmed their opposition to power-based unilateral attempts to change the status-quo and importance of cooperation on establishing the rule of law and freedom of navigation in the East China Sea and South China Sea. The Ministers agreed to closer cooperation to ensure the peace and stability of the East China Sea, and reaffirmed that Article 5 of the Japan-U.S. Security Treaty applies to the Senkaku Islands and that both countries oppose any unilateral actions that would undermine Japan's administration of the islands. The Ministers confirmed that Japan and the United States play an increasing role in ensuring the peace and prosperity in the Asia Pacific Region in order to maintain and strengthen a Free and Open Indo-Pacific, and that it is importance to strengthen cooperation with diverse partners through activities such as joint trainings and capacity building assistance, with Japan and the United States serving as the cornerstones.

Date	Meeting/Venue	Participants	Summary of the outcome
August 29, 2020	Japan-U.S. Defense Ministerial Meeting / Guam	Minister of Defense Kono U.S. Secretary of Defense Esper	<ul style="list-style-type: none"> • The Ministers confirmed the repeated launches of ballistic missiles by North Korea violated the UN Security Council resolution and pose a serious challenge not only to Japan but also to the international community. The Ministers also confirmed the importance of ensuring the full implementation of U.N. Security Council resolutions on the complete, verifiable and irreversible disposal of all weapons of mass destruction and ballistic missile programs of all ranges by North Korea, and agreed that Japan and the United States will continue to work together with interested countries to address the issue of ship-to-ship transfers of goods by North Korea. • The Ministers agreed that in order to implement the strategies of both countries, Japan and the United States will work closely together to further strengthen the deterrence and response capabilities of the Japan-U.S. alliance. • As a part of the above, the Ministers agreed on the importance of strengthening comprehensive ballistic missile defense capabilities and ISR capabilities based on stimulated military activities and military technology advances in surrounding countries. • The Ministers confirmed the progress on the relocation project in Guam and welcomed its steady progress. • The Ministers confirmed that the relocation of Marine Corps Air Station (MCAS) Futenma to Henoko is the only solution to avoid continued use of the Air Station. • The Ministers confirmed that Japan and the United States will work closely together in order to prevent the spread and mitigate the impacts of COVID-19. • The Ministers confirmed the importance of maintaining the responsiveness of U.S. Forces in Japan and agreed that for such maintenance, Japan and the United States will continue to work together under the recognition that local understanding and cooperation are indispensable.
March 16, 2021	Japan-U.S. Security Consultative Committee (Japan-U.S. "2+2") / Tokyo	Minister of Defense Kishi Minister for Foreign Affairs Motegi U.S. Secretary of Defense Austin U.S. Secretary of State Blinken	<ul style="list-style-type: none"> • The Ministers reaffirmed that the Japan-U.S. Alliance remains the cornerstone of peace, security, and prosperity in the Indo-Pacific region, and renewed the unwavering commitment of both countries to the Japan-U.S. Alliance. Amid growing geopolitical competition and challenges such as COVID-19, climate change, and revitalizing democracy, the Ministers concurred to promote a Free and Open Indo-Pacific and a rules-based international order. • In light of the severe security environment, the Ministers concurred to further deepen coordination to strengthen the deterrence and response capabilities of the Japan-U.S. Alliance. Japan expressed its resolve to enhance its capabilities to bolster national defense and the Alliance. The U.S. underscored its unwavering commitment to the defense of Japan through the full range of its capabilities, including nuclear. • The Ministers instructed their respective offices to advance concrete works to strengthen the Alliance. They concurred to hold another SCC later this year to confirm their outcomes. • The Ministers acknowledged that China's behavior, where inconsistent with the existing international order, presents political, economic, military, and technological challenges to the Alliance and to the international community. They also committed to opposing coercion and destabilizing behavior toward others in the region, which undermines the rules-based international system. • The Ministers opposed any unilateral action that seeks to change the status quo, including in the East China Sea and the South China Sea, and expressed serious concerns about China's Coast Guard law. The Japanese side expressed its resolve to defend its territory with every means. The Ministers reaffirmed that Article V of the Japan-U.S. Security Treaty applies to the Senkaku Islands and affirmed that both nations oppose any unilateral action that seeks to undermine Japan's administration of these islands. • The Ministers reiterated their objections to China's unlawful maritime claims and activities in the South China Sea. • The Ministers underscored the importance of peace and stability in the Taiwan Strait. The Ministers also shared serious concerns regarding the human rights situation in Hong Kong and the Xinjiang Uyghur Autonomous Region. • The Ministers affirmed the importance of the full implementation of UN Security Council resolutions towards the complete denuclearization of North Korea, and concurred to continue the cooperation between Japan and the U.S., as well as among Japan, the U.S. and the Republic of Korea. They also confirmed the necessity of the immediate resolution of the abductions issue. • The Ministers confirmed their cooperation among Japan, the U.S., Australia and India. They also pledged to work with the Association of Southeast Asian Nations (ASEAN), affirming their strong support for its centrality and unity, as well as for the ASEAN Outlook on the Indo-Pacific. • Recognizing the increasingly serious regional security environment, the Ministers concurred to further deepen coordination to strengthen the deterrence and response capabilities of Japan-U.S. Alliance by consulting on Alliance roles, missions, and capabilities. • The Ministers concurred to closely align the strategies and policies of the two countries, as the U.S. undertakes various policy reviews. • The Ministers concurred to deepen defense cooperation across all domains and to bolster extended deterrence. They also highlighted the importance of cooperation in domains such as space and cyber, as well as further strengthening information security. • The Ministers reiterated that realistic bilateral and multilateral exercises and training are necessary to maintain the Alliance's operational readiness and deterrent posture, as well as to meet future challenges. • The Ministers shared the view that they will steadily implement the realignment of U.S. forces in Japan, from the perspective of mitigating the impact on local communities including Okinawa, while maintaining the deterrence of the Japan-U.S. Alliance. The Ministers welcomed progress on force realignment efforts and reaffirmed that they will implement the current arrangements in ways that maintain operational readiness and a sustainable presence, while mitigating the impact on local communities. • The Ministers reconfirmed that the plan to construct the Futenma Replacement Facility at the Camp Schwab-Henokosaki area and in adjacent waters is the only solution that avoids the continued use of MCAS Futenma, and committed to completing construction as soon as possible.

Date	Meeting/Venue	Participants	Summary of the outcome
March 16, 2021	Japan-U.S. Security Consultative Committee (Japan-U.S. "2+2") / Tokyo	Minister of Defense Kishi Minister for Foreign Affairs Motegi U.S. Secretary of Defense Austin U.S. Secretary of State Blinken	<ul style="list-style-type: none"> Regarding Host Nation Support, having agreed to a one-year extension amendment to the current Special Measures Agreement, the Ministers instructed their negotiators to work toward a new mutually beneficial multi-year agreement. The Japanese side stressed the importance of steadily implementing the realignment of U.S. forces in Japan, and requested the U.S. side for safe operations of the U.S. forces with utmost consideration to the impact on local communities as well as appropriate responses to incidents and accidents. The Japanese side reiterated their appreciation for the assistance provided by the U.S. in the wake of the Great East Japan Earthquake. In remembrance of the lives lost, the Ministers reaffirmed the spirit of cooperation of the Japan-U.S. Alliance.
March 16, 2021	Japan-U.S. Defense Ministerial Meeting / Tokyo	Minister of Defense Kishi U.S. Secretary of Defense Austin	<ul style="list-style-type: none"> The Ministers confirmed that the Japan-U.S. Alliance is more important than ever for the regional peace and stability in the security environment that is rapidly growing severe. The Ministers affirmed that Japan and the U.S. will work to maintain and reinforce a Free and Open Indo-Pacific with the Japan-U.S. Alliance being the cornerstone. The Japanese side expressed the strong resolve to the defense of Japan and stated that Japan will play an active role for the regional peace and stability. The U.S. side welcomed the statement and confirmed the unwavering commitment of the United States to the defense of Japan. The Ministers concurred that they will work together to further strengthen the Alliance capabilities to deter and respond. As China's behaviors that do not conform to international order pose challenges to the Alliance and the international community, the Ministers agreed to have consultations going forward on actions to be taken by defense authorities. The Japanese side stated it is entirely unacceptable that China's Coast Guard Law, which includes problematic stipulations in terms of the consistency with the international law, heightens tension in the waters such as the East and South China Seas, and the Ministers expressed their serious concern. The Ministers also shared the recognition on the importance of peace and stability of the Taiwan Strait. The Ministers reconfirmed the commitment to the complete denuclearization of North Korea and strongly urged North Korea to abide by its obligations under the UN Security Council Resolutions. The Ministers also agreed that Japan and the United States will continue working together with partner countries to counter illicit ship-to-ship transfers of goods by North Korea-related vessels. The Ministers affirmed the importance of strengthening cooperation with various partners in the region and beyond, including strengthening cooperation among Japan, the United States, Australia and India, to maintain and strengthen a Free and Open Indo-Pacific. The Ministers agreed to work together to deepen cooperation in all domains including space and cyberspace, aligning the respective strategies of both countries through close consultations. The Ministers concurred on the importance of strengthening the readiness of both Self-Defense Forces and U.S. Forces in Japan through measures such as various high-end training including bilateral training in order to enhance the Alliance capabilities to respond and deter. The Ministers confirmed that the two countries will closely coordinate with each other regarding the Global Posture Review of the United States. The Ministers welcomed the realignment initiatives of U.S. Forces in Japan so far including the relocation of MCAS Futenma to Henoko and facility development of Mageshima, and agreed that Japan and the United States will continue to closely work together to steadily advance them. The Ministers reconfirmed that the relocation of MCAS Futenma to Henoko is the only solution to avoid the continued use of MCAS Futenma and agreed to continuously advance the project. The Ministers confirmed that it is essential to gain understanding and cooperation from the local communities for the stable stationing of the U.S. Forces in Japan and their daily operations, and affirmed the importance of ensuring safe and environmentally conscious operations of the U.S. forces.
April 16, 2021	Japan-U.S. Summit Meeting / Washington D.C.	Prime Minister Suga President Biden	<ul style="list-style-type: none"> The leaders confirmed the Japan-U.S. alliance is unwavering, and the two countries are more prepared than ever before to respond to regional challenges. The Japan-U.S. Alliance is committed to promoting the shared vision of a Free and Open Indo-Pacific based on the commitment to universal values and shared principles. The two countries respect sovereignty and territorial integrity, as well as peaceful conflict resolution, and oppose intimidation. Japan is determined to strengthen its defense capabilities in order to further enhance the security of the alliance and the region. The United States reiterated its unwavering support for Japan's defense under the Japan-U.S. Security Treaty through the use of all kinds of its defense capabilities, including nuclear weapons, and reaffirmed that Article 5 of the Japan-U.S. Security Treaty is applicable to the Senkaku Islands. Both Japan and the United States oppose any unilateral actions that would undermine Japan's administration of the islands. The importance of strengthening cybersecurity and information protection between the two countries, which serve as the fundamental factor in a closer defense cooperation, and protection of both countries' technological advantages are emphasized. Both countries agreed to continuously commit to implementing current arrangements for the restructuring of U.S. Forces in Japan, including installing a replacement facility of Futenma Air Station in Henoko, which is the only solution to avoiding the continuous use of MCAS Futenma, establishing a carrier-based aircraft landing training facility on Mageshima Island, and relocating the U.S. Marine Corps from Okinawa to Guam. The leaders decided to conclude a meaningful multi-year agreement on the Host Nation Support in a timely manner in order to ensure stable and sustainable stationing of the USFJ. The leaders exchanged opinions on the impact of China's actions on peace and prosperity in the Indo-Pacific region and the world, and shared concerns for China's actions that are discordant with international order based on rules. Japan reiterated its opposition to the various unilateral attempts to change the status-quo in the East China Sea, and China's illegal claims of maritime interest and activities in the South China Sea, as well as reaffirmed the strong common interest in a free and open South China Sea.

Date	Meeting/Venue	Participants	Summary of the outcome
April 16, 2021	Japan-U.S. Summit Meeting / Washington D.C.	Prime Minister Suga President Biden	<ul style="list-style-type: none"> • Japan and the United States emphasized the importance of peace and stability in the Strait of Taiwan and prompted a peaceful resolution of cross-strait issues. • The leaders shared deep concerns for the human rights situation in Hong Kong and the Xinjiang Uygur Autonomous Region. Japan and the United States recognized the importance to conduct frank dialogue with China, reiterated their intention to communicate their concerns directly, and recognized the need for cooperation with China in areas of common interest. • Japan and the United States reaffirmed their commitment to the complete denuclearization of North Korea, while calling on North Korea to comply with its obligations under U.N. Security Council resolutions, and called on the international community to fully implement the resolutions. President Biden reaffirmed the U.S. commitment to an immediate resolution to the abductions issue. • Japan and the United States will continue to work with allies and partners, including Australia and India, through an even stronger U.S.-Japan-Australia-India (quad) partnership. Japan and the United States support ASEAN's solidarity and centrality in the Indo-Pacific and the ASEAN Outlook on the Indo-Pacific. • The countries agreed that trilateral cooperation with the Republic of Korea is essential for common security and prosperity. • Japan and the United States resolutely condemned violence against civilians by Myanmar's military and police, and committed to continuing action to push for an immediate end to violence, the release of detained persons, and an early restoration of democracy.

Section 2**Strengthening Ability of Japan-U.S. Alliance to Deter and Counter Threats**

The NDPG provides that, for strengthening the ability of the Japan-U.S. Alliance to deter and counter threats, in all stages from peacetime to armed contingencies as well as during disasters, Japan will enhance information sharing with the United States, conduct effective and smooth bilateral coordination involving all relevant organizations and take all necessary measures to ensure Japan's peace and security.

For these purposes, Japan will further deepen various operational cooperation and policy coordination with

the United States. In particular, Japan will expand and deepen cooperation in: space and cyber domains; comprehensive air and missile defense; bilateral training and exercises; bilateral ISR operations; and bilateral flexible deterrent options. Japan will also promote the development and update of bilateral plans and deepen the Extended Deterrence Dialogue. In addition, Japan will even more actively conduct activities such as logistic support for U.S. force activities and protection of U.S. ships and aircraft.

1 Cooperation in Space and Cyber Domains**1 Cooperation on Space**

With regard to cooperation on space, based on the agreement at the Japan-U.S. summit meeting in November 2009 to promote cooperation in the area of space security as part of initiatives to deepen the Japan-U.S. Alliance, the two countries have periodically been working together to discuss how they should cooperate in the future, such as the holding of the 1st Japan-U.S. Space Security Dialogue in September 2010 with the participation of relevant ministries and agencies.

Furthermore, at the Japan-U.S. summit meeting in April 2012, the leaders decided to deepen the space-based partnership for civil and security purposes and to create a whole-of-government comprehensive dialogue on space, enabling relevant ministries and agencies to hold the 1st whole-of-government Japan-U.S. Comprehensive Dialogue on Space in March 2013. The two countries have been sharing information on their respective space policies and discussing plans for future cooperation on a regular basis.

Moreover, based on the instructions given by the Japan-U.S. Defense Ministerial Meeting of April 2015, the two countries established the Space Cooperation Working Group (SCWG) to further promote the cooperation among bilateral defense authorities in the area of space. The SCWG has held seven meetings in total since its establishment in October 2015 (the most recent meeting was in March 2021). Going forward, Japan and the United States will leverage this working group to deepen discussions in a wide variety of areas, including (1) promoting space policy dialogue, (2) reinforcing information sharing, (3) working together to develop and secure experts, and (4) continuing participation in tabletop exercises.

In August 2020, U.S. Space Force Chief of Space Operations Raymond paid a courtesy visit to then Prime Minister Abe and Minister of Defense Kono, met with ASDF Chief of Staff Izutsu, and agreed to promote stronger cooperation between Japan and the United States in the space field.

 **See** Chapter 3, Section 3-1 (Cooperation in Use of Space Domain), p. 397

2 Cooperation on Cyberspace

Concerning cooperation on cyberspace, the Cyber Defense Policy Working Group (CDPWG) was established in October 2013 as a framework between the MOD and the DoD to discuss a broad range of professional and concrete issues, including the sharing of information at the policy level, human resources development, and technical cooperation. In addition, the Japanese and U.S. defense authorities continue to participate in the "Japan-U.S. Cyber Dialogue," which is the overall framework for the two governments regarding cyber cooperation, and they also hold the "Japan-U.S. IT Forum," a framework



ASDF Chief of Staff Izutsu meeting with U.S. Space Force Chief of Space Operations Raymond (August 2020)

between the defense authorities regarding information and communications.

The Guidelines released in April 2015 and the CDPWG Joint Statement published in May 2015 cited the prompt and appropriate establishment of an information sharing structure and the protection of the critical infrastructure upon which the SDF and the U.S. Forces depend to accomplish their missions as examples of cooperation between the Japanese and U.S. governments. In addition, as part of cooperation between the SDF and the U.S. Forces, the securing of the resiliency of their respective networks and systems and the implementation of educational exchanges and joint exercises were also cited. At the “2+2” Meeting in April 2019, Japan and the United States agreed to strengthen cooperation in the field of cyberspace, affirming that international law applies in cyberspace and that a cyber attack could, in

certain circumstances, constitute an armed attack for the purposes of Article 5 of the Japan-U.S. Security Treaty.

In terms of operational cooperation, cyber-attack countermeasure training has been conducted as part of the Japan-U.S. Bilateral Joint Exercise (field training exercises) and in the Japan-U.S. Joint Regional Army command post exercise. The training was also carried out as part of the Japan-U.S. Bilateral Joint Exercise (field training exercise) from October to November 2020. In addition, Japan is also cooperating with the United States in the field of human resources, by such measures as dispatching liaison officers to the U.S. Army's cyber educational institution and sending personnel to cyber warfare commanders' courses at the National War College of the United States.

 Chapter 3, Section 3-2 (Cooperation in Use of Cyber Domain), p. 397


2 Comprehensive Air and Missile Defense

Regarding the response to airborne threats coming to Japan, such as ballistic missiles, cruise missiles and aircraft, Japan-U.S. bilateral response capabilities have been enhanced by conducting Japan-U.S. joint air defense/missile defense exercises in addition to sharing operational information and establishing response procedures. In addition, for the repeated ballistic missile launches by North Korea, Japan and the United States have conducted coordinated responses utilizing the ACM.

In the systems and technology field, the cooperative development of a new ballistic missile defense (BMD) interceptor with enhanced capabilities (SM-3 Block

IIA) is progressing, with its acquisition beginning with the FY2017 budget, and it has moved to the joint production/deployment stage. In addition, in November 2020, the United States succeeded in intercepting an Intercontinental Ballistic Missile (ICBM) with SM-3 Block IIA, demonstrating its high reliability and capability as an interceptor missile.

In the Missile Defense Review (MDR) released in January 2019, the United States clearly indicated the importance of cooperation with allies, including Japan.

 Chapter 1, Section 2-2 (Response to Missile Attacks), p. 265

3 Bilateral Training and Exercises

Bilateral training and exercises in peacetime not only contribute greatly to maintaining and enhancing the bilateral response capabilities by improving interoperability including mutual understanding of tactics and communication, but are also beneficial for improving tactical skills for each participant. In particular, the knowledge and techniques that the Japanese side learns from the U.S. Forces, which have vast experience in actual fighting, are invaluable and greatly contribute to improving SDF capabilities.

In addition, conducting bilateral training at effective times, places, and scales demonstrates the unified commitment and capabilities of Japan and the United States, which has a deterrent effect. In light of these perspectives, the MOD/SDF is continuing its initiatives to enrich the contents of bilateral training and exercises.

Bilateral training has been expanded not only within Japan but also to the United States by dispatching SDF units there. Continuous efforts are being made to enhance interoperability and Japan-U.S. bilateral response capabilities at the military branch and unit levels, including the Japan-U.S. bilateral regional army command post exercises, special anti-submarine exercises, and Japan-U.S. bilateral fighter combat training.

Since FY1985, mostly on an annual basis, command post exercises and field training exercises have been conducted alternately as the Japan-U.S. bilateral joint exercise. From October to November 2020, about 37,000 Ground, Maritime and Air Self-Defense Forces personnel, about 20 ships, and about 170 aircraft participated in the Keen Edge 21 field exercises in sea and air spaces surrounding Japan, Tanegashima Island,



Japanese and U.S. personnel participating in field training (Forest Light (Eastern Army)) with the U.S. Marine Corps in FY2020.



Command practice during a practice voyage in FY2020 (first half of the year) to send off the aircraft carrier USS "Ronald Reagan" in the South China Sea.



U.S. and Japanese personnel writing a message on the goods to be airdropped as part of the Christmas Drop (Humanitarian Assistance/ Disaster Relief Exercise in the Federal States of Micronesia, etc.)

and Gajajima Island, etc.

In addition, as the most recent trainings and exercises, in December 2020 the GSDF and the U.S. Army, among others, participated in a Japan-U.S. Bilateral Command Post Training Exercise (YS-79), and practiced command staff activities for joint operations.


Furthermore, Japan and the United States have conducted bilateral training in various sea and airspace areas. As an example, in July 2020 the MSDF training


ships "Kashima" and "Shimayuki" and the aircraft carrier USS "Ronald Reagan," etc., conducted bilateral training during a practice voyage in the South China Sea. In addition, the ASDF is conducting a variety of training with U.S. Air Force B-52 bombers and B-1 bombers, etc., in the Sea of Japan, in the East China Sea, and in the airspace around Okinawa.

These series of bilateral training were conducted with the aim of enhancing the tactical skills of the SDF and bolstering collaboration with the U.S. Forces. It is believed that strengthening Japan-U.S. collaboration and demonstrating the bilateral ties as an outcome will effectively enhance the deterrence and response capabilities of the overall Japan-U.S. Alliance further and demonstrate Japan's determination and high capacity towards stabilizing the region in the increasingly severe security environment surrounding Japan.


In recent years, the USFJ have also participated in disaster drills organized by local governments, thereby deepening cooperation with relevant institutions and local governments.

 **See** Reference 19 (Record of Main Japan-U.S. Bilateral Exercises in FY2020)







Video: Japan-U.S. Bilateral Joint Field Training Exercise (FTX) "Keen Sword 2020"
URL: <https://youtu.be/ZCCwo0B4mTo>



Video: Japan-U.S.-Australia "Christmas Drop" trilateral HA/DR exercise in the Federated States of Micronesia, etc.
URL: <https://youtu.be/T7THDbohMgw>







Video: Japan-U.S. Bilateral Exercises
URL: <https://youtu.be/nOf7WE4MHVw>

VOICE

Voice of Personnel Member who Participated in Yamasakura (YS) to Further Strengthen the Japan-U.S. Alliance

Colonel ENDO Tomoaki, Director, Defense Plans & Programs Division, Western Army Headquarters, GSDF (Kumamoto City, Kumamoto Prefecture)

Every year, the GSDF and the U.S. Army conduct the Japan-U.S. Bilateral Regional Army command post exercise (commonly known as "Yamasakura"). In 2020, the GSDF Western Army Headquarters, to which I belong, took part in the exercise, which gave me the opportunity to participate.

In the past, many U.S. Army officers under the 1 Corps Commanding General would come to Japan and set up command posts and the joint coordination office in the GSDF camp. However, due to the worldwide spread of COVID-19 infections, this time the exercise was not held with the Japanese and U.S. personnel meeting face-to-face at the same location,

but rather in a format where the exercise units were linked by communication with their respective camps and bases.

As a result, from the preparation stage of the exercise to the comprehensive training, in addition to the language barrier, we also faced the barrier of three different time zones in Japan and the United States (Washington State and Hawaii). However, both Japan and the U.S. were able to successfully achieve our goals by using various means of communication while taking thorough measures to prevent the spread of COVID-19.

The greatest achievement of this exercise was that it proved that teamwork between Japan and the U.S. can overcome all difficulties. With the lessons learned through participation in the exercise, I will continue to make my own small contribution to strengthening the Japan-U.S. Alliance.



The author (right) coordinating with the head of the U.S. Army liaison team



Video teleconference between Japanese and U.S. commanders

4 Intelligence, Surveillance and Reconnaissance (ISR) Activities

With regard to bilateral ISR activities, it is important to implement ISR activities in a broad Asia-Pacific region in cooperation between Japan and the United States to enhance the efficiency and effectiveness of the activities of both countries.

The expansion of these ISR activities will function as deterrence capabilities, and will also ensure information superiority over other nations and enable the establishment of a seamless cooperation structure in all phases from peacetime to contingencies.

5 Maritime Security

In accordance with the Guidelines and others, the two governments will cooperate closely with each other on measures to maintain maritime order based upon international law, including freedom of navigation. The SDF and the U.S. Forces will cooperate, as appropriate,

on various efforts such as maintaining and enhancing bilateral presence in the maritime domain through ISR and training and exercises, while further developing and enhancing shared maritime domain awareness including by coordinating with relevant agencies, as necessary.

6 Logistics Support

Japan-U.S. cooperation is also being steadily promoted through logistics support based on the Acquisition and

Cross-Servicing Agreement (ACSA) signed in 1996 and revised in 1999 and 2004. The Agreement is designed to

VOICE**Voices of ASDF and USAF Commanders who Participated in Japan-U.S. Bilateral Training****Colonel YOSHIMITSU Junichi, Commander, 306th Squadron, Flight Group, 6th Air Wing, ASDF (Komatsu City, Ishikawa Prefecture)**

In addition to improving tactical skills, the ASDF conducts formation and navigation training with the U.S. military to promote mutual understanding between Japan and the United States, ensure interoperability, and enhance Japan-U.S. response capabilities. This training is a valuable opportunity to maintain and strengthen the readiness of our units. Fighter jets such as F-15s and F-2s participate from the ASDF, and from the U.S. Forces, bombers and fighter jets from the Air Force as well as aircraft from the Navy and Marine Corps participate. In the September 2020 training that I participated in, two B-1 bombers from the U.S. Air Force and a total of 20 F-15 fighters from four ASDF bases across Japan took part in the training.

Furthermore, after the training, both the Japanese and U.S. squadron

commanders who participated in the exercise sent comments to the U.S. Pacific Air Forces' website, which widely disseminated a message of the strong Japan-U.S. Alliance and ongoing efforts for a "Free and Open Indo-Pacific," and showed that Japan and the U.S. stand together.

In 2020, even in the midst of the COVID-19 crisis, we have seized all opportunities to actively and continuously conduct various training, including Japan-U.S. bilateral/multilateral training, and improve our systematic response capabilities. We will continue to engage in daily training and missions for peace in Japan and regional stability.



Colonel Yoshimitsu, Commander of the 306th Squadron, after completing flight training



SDF and U.S. military aircraft during bilateral training (Photograph taken on December 4, 2020)

Lieutenant Colonel Mike Taylor, Commander, 34th Expeditionary Bomb Squadron, U.S. Air Force

I'm proud of how our entire team performed. Each member propelled our team forward and allowed us to demonstrate our unparalleled combat power. These missions are invaluable to our crews and the experience they gain training across the globe. Our B-1s have the capacity and our team is ready to provide a wide range of proactive, scalable options when we are called on.

(Quote from the U.S. Pacific Air Forces website)




Lieutenant Colonel Mike Taylor, Commander of the 34th Expeditionary Bomb Squadron, receiving a report

positively contribute to the smooth and effective operation under the Japan-U.S. Security Treaty and to initiatives for international peace taken under the leadership of the United Nations (UN). Its scope of application includes various occasions such as bilateral training and exercises in peacetime, disaster relief activities, UN PKO, international disaster relief activities, and armed attack situations. If either the SDF or the U.S. Forces request the other party to provide supplies or services, the Agreement, in principle, allows the requested party to do so.¹

Following the passage of the Legislation for Peace and Security in September 2015, the new Japan-U.S. ACSA

was signed in September 2016, ratified by the Diet on April 14, 2017, and entered into force on April 25. This has enabled the same framework as the existing Japan-U.S. ACSA, such as settlement procedures, to be applied to the provision of supplies and services that had become possible under the Legislation for Peace and Security, so that since April 2017 food and fuel have been provided to the U.S. Forces engaged in information collection and other activities.

 Chapter 1, Section 5-3 (Other Efforts and Activities, etc.), p. 301 Fig. III-2-2-1 (Japan-U.S. Acquisition and Cross-Servicing Agreement [ACSA])

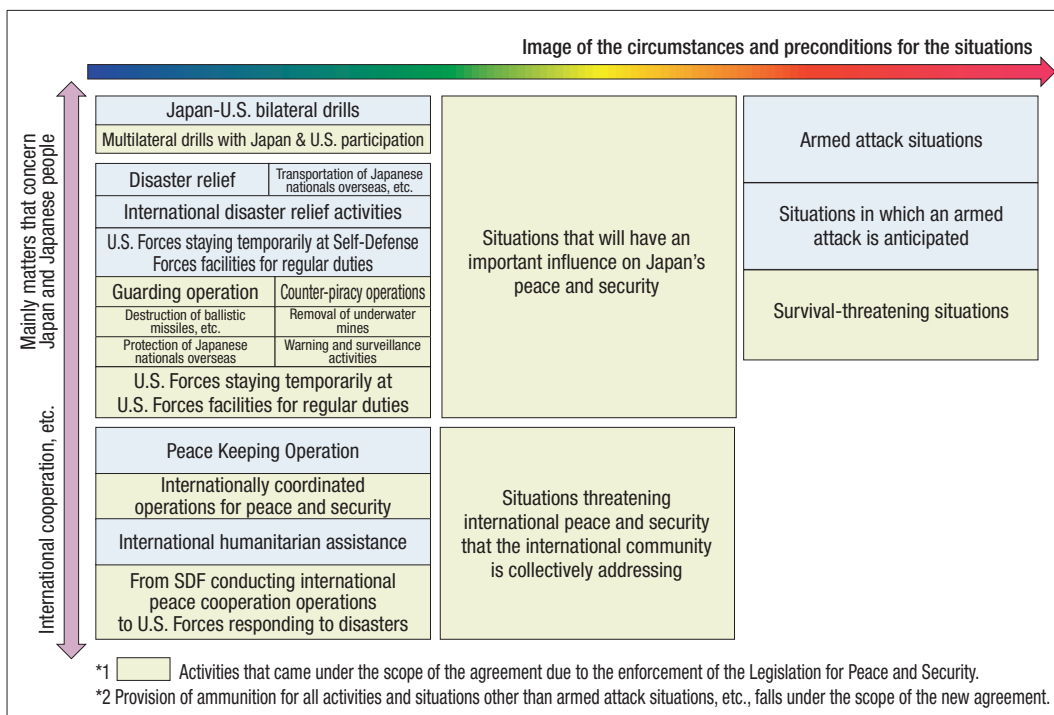
¹ The categories of supplies and services as provided under the Agreement include: food; water; billeting; transportation (including airlift); petroleum, oils, and lubricants; clothing; communications; medical services; base support; storage services; use of facilities; training services; spare parts and components; repair and maintenance services; airport and seaport services; and ammunition (provision of weapons is not included).

Fig. III-2-2-1 Japan-U.S. Acquisition and Cross-Servicing Agreement (ACSA)

Significance of reciprocal provision of supplies and services

In general, supplies and services necessary for unit operations are replenished by the units themselves. However, in such cases where allied nations are operating together, the reciprocal provision of supplies and services on site would enhance the flexibility of the operations.

Scope of the Japan-U.S. Acquisition and Cross-Servicing Agreement (ACSA)



7 Cooperation in Response to a Large-Scale Disaster in Japan

In the aftermath of the Great East Japan Earthquake in 2011, the SDF and the U.S. Forces demonstrated their high-level joint response capabilities based on the strong ties they had developed. The success of the joint response between the SDF and the U.S. Forces through Operation Tomodachi was the result of Japan-U.S. Bilateral Training and Exercises over many years, and will lead to the Alliance being deepened further in the future. Operation Tomodachi involved the deployment of a large-scale force at its peak, including troops of approximately 16,000 personnel, around 15 ships, and around 140 aircraft, resulting in relief activities that were unprecedented in scale and contributing greatly to Japan's restoration and reconstruction. Not only those affected but numerous Japanese at large were filled with a deepened sense of appreciation and trust for the USFJ.

On the other hand, some issues have emerged, such as clarifying the roles, missions and capabilities of Japan and the United States in the event of a disaster within Japan, as well as stipulating more concrete joint guidelines to facilitate greater participation by the U.S.

Forces in disaster prevention drills, and examining mechanisms for the sharing of information and more effective coordination mechanism.

In light of these issues, the December 2013 Response Plan for a Massive Earthquake in the Nankai Trough listed the Japan-U.S. Joint Response Plan, and the two countries have conducted several bilateral comprehensive disaster prevention training aimed at maintaining and enhancing earthquake disaster handling capabilities to be demonstrated through collaboration between the SDF, USFJ, related ministries and agencies, and related local governments in the event of the occurrence of a Nankai Trough earthquake.

In response to the Kumamoto Earthquake in 2016, Japan-U.S. cooperation was manifested in the form of the transportation of daily necessities by the Osprey (MV-22) of the U.S. Marine Corps and the transportation of SDF personnel by C-130 transport aircraft. The ACM was utilized on that occasion, including the Japan-U.S. Joint Coordination Office locally established by the joint task force organized for the earthquake response.

Section 3

Strengthening and Expanding Cooperation in a Wide Range of Areas

1 Creation of a Desirable Security Environment

The NDPG provides that in order to create a desirable security environment including maintaining and enhancing free and open maritime order, and with an eye on increasing Japanese and U.S. presence in the Indo-Pacific region, Japan will conduct bilateral activities.


1 Maintaining and Enhancing Maritime Order

Both Japan and the United States have made efforts as maritime nations to maintain and develop “open and stable seas” according to fundamental rules such as securing the freedom and safety of navigation, and the rule of law including peaceful dispute resolution based on international law.

For example, the SDF has dispatched its officers to the U.S. Central Naval Command in Bahrain to carry out intelligence gathering activities in the Middle East, which began as a Japan-initiated activity in 2020.

The two countries have also been working closely together on providing multilateral capacity building in

the maritime domain to countries including those along the sea lanes.

 See Chapter 3, Section 2 (Ensuring Maritime Security), p. 391

2 Humanitarian Assistance/Disaster Relief

The SDF has conducted activities in close cooperation with the United States and other participating countries through activities pursuant to the former Anti-Terrorism Special Measures Act, and international disaster relief activities and international peacekeeping operations in the Philippines and Haiti.

Japan and the United States worked closely together at local multilateral coordination centers to respond to the typhoon disaster that hit the Philippines in November 2013. To respond to the outbreak of the Ebola virus disease, Japan started to dispatch liaison officers to the U.S. Africa Command in October 2014, coordinating efforts and collecting information with relevant countries including the United States, for close cooperation.

2 Initiatives for Leveraging Capabilities

The NDPG provides that in order for Japan and the United States to be able to fully leverage their capabilities during bilateral activities, Japan will enhance and expand cooperation with the United States in the fields of equipment, technology, facility, and intelligence as well as information security.

1 Defense Equipment and Technology Cooperation

Japan proactively promotes cooperation in defense equipment and technology with the U.S. based on the mutual cooperation principle from the Japan-U.S. Security Treaty and the Mutual Defense Assistance Agreement between Japan and the United States of America, while bearing in mind the maintenance of the technological and industrial bases.

In view of the progress in technology cooperation between Japan and the United States, the improvement of technological level, and other factors, Japan decided

to transfer its military technology to the United States regardless of the Three Principles on Arms Exports and related guidelines. In 1983, Japan signed the Exchange of Notes concerning the Transfer of Military Technologies to the United States of America,¹ and in 2006, instead signed the Exchange of Notes concerning the Transfer of Arms and Military Technologies to the United States of America.² Also, under these frameworks, Japan has decided to provide the United States with 20 items of arms and military technologies, including military technologies related to joint technological research on BMD. Both countries consult with each other at forums such as the Systems and Technology Forum (S&TF) and conduct cooperative research and development regarding the specific projects agreed upon at these forums.

Additionally, the Ministers signed a Reciprocal Defense Procurement Memorandum of Understanding (RDP MOU)³ at the Japan-U.S. Defense Ministerial Meeting in June 2016. The MOU promotes measures based on reciprocity (providing information necessary to

1 Official title: Exchange of Notes concerning the Transfer of Military Technologies to the United States of America

2 Official title: Exchange of Notes concerning the Transfer of Arms and Military Technologies to the United States of America

3 Official title: Memorandum of Understanding between the Department of Defense of the United States of America and the Ministry of Defense of Japan concerning Reciprocal Defense Procurement

tender bids for businesses of the other country, protecting submitted corporate information, waiving restrictions on participation by businesses of the other country, etc.), concerning the procurement of equipment by Japanese and U.S. defense authorities.

Part IV, Chapter 2, Section 5-2 (Deepening Relationships with the United States regarding Defense Equipment and Technology Cooperation) explains the production, sustainment and maintenance of common equipment (F-35 fighter aircraft and Ospreys) between Japan and the United States.

See Reference 20 (Japan-U.S. Joint Research and Development Projects)

Part IV, Chapter 2, Section 5-2 (Deepening Relationships with the United States regarding Defense Equipment and Technology Cooperation), p. 457

2 Joint/Shared Use

The expansion of joint/shared use of facilities and areas also means increasing bases for the SDF's activities such as maneuver areas, ports, and airfields, which in turn enables closer operational coordination, expanded interoperability, and improved flexibility and resilience during bilateral activities. The SDF has only a limited

number of facilities in Okinawa, including Naha Air Base of the ASDF, and most of them are located in urban areas, which results in operational limitations. The joint/shared use of facilities and areas of the USFJ in Okinawa will greatly improve the SDF's training environment in Okinawa, and facilitate implementation of bilateral/multilateral training and exercises and expanded interoperability between the SDF and the U.S. Forces. It will also improve readiness and contribute to ensuring the safety of local people in case of a disaster.

Thus, while taking into account the SDF defense posture in the regions, including the Southwestern Islands, and relations with local communities, Japan and the United States are proactively engaged in consultations, and specific initiatives are steadily progressing. For example, the GSDF has been using Camp Hansen since March 2008 for training. Moreover, the relocation of the Air Defense Command Headquarters to Yokota in April 2012 and the relocation of the then GSDF Central Readiness Force Headquarters to Zama in March 2013 were carried out. In addition, the development of training ranges in Guam and the Northern Mariana Islands (Tinian Island, Pagan Island, etc.) for shared use by the SDF and the U.S. Forces is under consideration.

Column

Japan-U.S. Joint "Elephant Walk" Conducted

On June 22, 2020, the 3rd Air Wing of the Japan Air Self-Defense Force's Misawa Air Base, together with the U.S. Air Force's 35th Fighter Wing, conducted the first-ever Elephant Walk. An Elephant Walk involves having numerous aircraft take to the runway to verify their ability to operate in large numbers and their readiness to respond. Taking advantage of Misawa Air Base, which is a Japan-U.S. joint-use base,



Photo from Elephant Walk

aircraft from both Japan and the United States, including Air Self-Defense Force F-35A fighter jets and U.S. Air Force F-16C fighter jets, gathered at the base, set up a formation at the airfield, and performed an impressive ground operation. The event was a great success, communicating both the Japan-U.S. alliance and the friendly relationship between the U.S. and Japanese air forces at Misawa Air Base.



3rd Air Wing Commander and 35th Fighter Wing Commander

Section 4

Steady Implementation of Measures Concerning Stationing of the USFJ

Under the Japan-U.S. Security Arrangements, the presence of USFJ functions as deterrence, while on the other hand, given the impacts of the stationing of the USFJ on the living environment of the local residents, it is necessary to make efforts appropriate for the actual situation of each area in order to mitigate the impacts. In particular, the realignment of the USFJ is a very

important initiative for mitigation of the impact on local communities, including those in Okinawa, and maintaining the deterrent capability of the U.S. Forces. Therefore, the MOD will advance the realignment and other initiatives and make continuous efforts to gain the understanding and cooperation of the local communities hosting USFJ facilities and areas.

1 Stationing of the USFJ

1 Significance of the Stationing of the USFJ

Given the increasingly severe security environment surrounding Japan, it is necessary to maintain the presence of the USFJ and its readiness to make rapid and agile actions in case of emergency in Japan and the surrounding areas even in peacetime, so that the Japan-U.S. Alliance based on Japan-U.S. Security Arrangements functions enough as a deterrent power that contributes to the peace and stability of the defense of Japan and the region.

Therefore, Japan accepts the stationing of the U.S. Forces based on the Japan-U.S. Security Treaty and it is a cornerstone of Japan-U.S. Security Arrangements.

Also, it is essential to realize the stable stationing of the USFJ in order to make a swift joint response to an armed attack on Japan based on Article 5 of the Japan-U.S. Security Treaty. In addition, the actions of U.S. Forces for the defense of Japan are conducted not only by the USFJ but also by timely reinforcements. The USFJ is supposed to be the basis for them.

While Article 5 of the Japan-U.S. Security Treaty stipulates the duty of the U.S. to defend Japan, the U.S. is granted the use of facilities and areas in Japan based on Article 6 for the purpose of maintaining the security of Japan and international peace and security in the Far East. Therefore, though the duties of each side are not the same, they are balanced overall.

2 Measures concerning the Stationing of the USFJ

The Japan-U.S. Status of Forces Agreement (SOFA)¹ stipulates matters pertaining to USFJ facilities and areas and the status of the USFJ, including the furnishing of facilities and areas for use by the USFJ (USFJ facilities and areas), and satisfying the labor requirements of the USFJ. In addition, the Supplementary Agreement on the Environment enhances cooperation for environmental stewardship relating to the USFJ, and the Supplementary Agreement on Civilian Component clarifies the scope of the civilian component, etc.

(1) Furnishing of USFJ Facilities and Areas

Japan furnishes USFJ facilities and areas under the provision of the SOFA, in accordance with agreements reached through the Joint Committee between the governments of Japan and the United States.

The Government of Japan concludes lease contracts with owners of private and public lands on which USFJ facilities and areas exist in order to ensure the stable use of these facilities and areas. However, should the government be unable to obtain the approval of landowners, it shall acquire usage rights² under the Act on Special Measures for USFJ Land Release,³ compensating the landowners for any loss they may have suffered in the process.

(2) Satisfying Labor Requirements of the USFJ

The SOFA stipulates that the manpower (labor) required by the USFJ shall be satisfied with the assistance of the Government of Japan.

As of the end of FY2020, there were 25,810 USFJ local employees (hereinafter referred to as the “USFJ

¹ Official title: Agreement Under Article VI of the Treaty of Mutual Cooperation and Security Between Japan and the United States of America, Regarding Facilities and Areas and the Status of United States Armed Forces in Japan

² The term “title” means a legal cause that justifies a certain act.

³ Official title: Act on Special Measures for USFJ Land Release, Incidental to the Agreement Under Article VI of the Treaty of Mutual Cooperation and Security Between Japan and the United States of America, Regarding Facilities and Areas and the Status of United States Armed Forces in Japan

employees”) at USFJ facilities and areas throughout Japan, working as clerks at headquarters, engineers at maintenance/supply facilities, members of security guards and fire departments on base, and sales staff at welfare/recreational facilities. They support the smooth operations of the USFJ.

The Government of Japan hires these USFJ employees in accordance with the provisions of the SOFA. The MOD supports the stationing of the USFJ by performing administrative work for personnel management, payment of wages, health care, and welfare, etc.

(3) Supplementary Agreement on Cooperation in the Field of Environmental Stewardship

In September 2015, the governments of Japan and the United States signed and effectuated the Agreement on Cooperation in the Field of Environmental Stewardship relating to the USFJ, supplementary to the SOFA. This supplementary agreement represents an international commitment with legal binding force and sets forth provisions concerning the issuance and maintenance of the Japan Environmental Governing Standards (JEGS) and the establishment and maintenance, etc., of procedures for access to USFJ facilities and areas. This agreement was the first of its kind created to supplement the SOFA since the SOFA had entered into force and has a historical significance that differs essentially in nature from conventional improvements in the operations of the SOFA.

 See Part IV, Chapter 5, Section 2-2 (Efforts on the USFJ Facilities and Areas), p. 491

(4) Supplementary Agreement on Civilian Component

In January 2017, the governments of Japan and the United States signed the Supplementary Agreement on Civilian Component, which came into force on the same day. This Supplementary Agreement clarifies the scope of the civilian component, which is addressed only by a general provision in SOFA, in addition to developing criteria used in evaluating contractor employee positions for eligibility to receive designation as members of the civilian component, and stipulates the procedures for notification and review, etc., together with the exclusion of ordinary residents from the civilian component. The initiative to formulate the Supplementary Agreement on Civilian Component is the second case, following the creation of the Supplementary Agreement on the Environment that supplements the SOFA.

(5) The Revision of the Guidelines Regarding Off-Base U.S. Military Aircraft Accidents

In July 2019, the governments of Japan and the United States agreed on the revision of the Guidelines Regarding Aircraft Accidents in Japan.⁴ This revision aims to refine the procedures for access to the site by Japanese and U.S. government officials in the event of off-base U.S. military aircraft accidents that occur in Japan, and so on. These changes enable more effective, expeditious and proper response to future U.S. military aircraft accidents.

3 USFJ-Related Costs

USFJ-related costs include cost sharing for the stationing of USFJ, costs for implementing the stipulations of the SACO Final Report to mitigate the impact on the people of Okinawa, as well as costs for implementing measures that contribute to mitigating the impact on the local communities associated with the initiatives for the realignment of the U.S. Forces.

 See Fig. III-2-4-1 (USFJ-Related Costs [Budget for FY2021])

4 Host Nation Support (HNS)

HNS plays an important role to ensure the smooth and effective implementation of the Japan-U.S. Security Arrangements. Due to soaring prices and wages in Japan since the mid-1970s, and changes in the international economic situation, Japan began to bear labor costs such as welfare costs for USFJ local employees in FY1978. Then in FY1979, it started to bear costs for the Facilities Improvement Program (FIP).

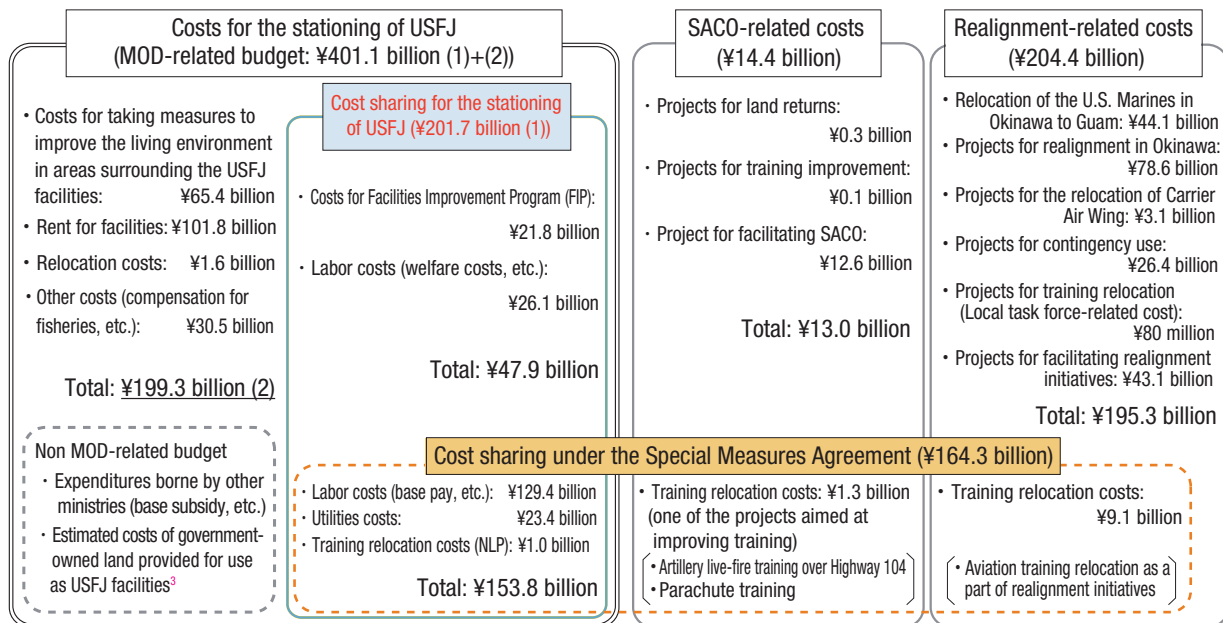
Furthermore, as labor costs soared due to changes in economic conditions surrounding both countries, there arose a concern that the employment stability of the employees would be undermined, and then the activities of the USFJ could be affected. Therefore, in 1987, Japan and the United States concluded an agreement that sets forth special measures regarding Article 24 of the SOFA (the Special Measures Agreement, or SMA)⁵ as exceptional, limited, and provisional measures relating to the cost sharing principle of the SOFA.

Based on this SMA, Japan started to bear labor costs of eight categories such as the adjustment allowance (currently replaced by the regional allowance). As the SMA was revised later on, the costs shared by Japan expanded to cover labor costs including base pay, and utilities costs from FY1991, and training relocation costs from FY1996.

⁴ Official title: Guidelines Regarding Off-Base U.S. Military Aircraft Accidents in Japan.

⁵ Official title: Agreement between Japan and the United States of America concerning Special Measures relating to Article XXIV of the Agreement under Article VI of the Treaty of Mutual Cooperation and Security between Japan and the United States of America, Regarding Facilities and Areas and the Status of United States Armed Forces in Japan

Fig. III-2-4-1 USFJ-Related Costs (Budget for FY2021)



Notes 1: Training relocation costs under the Special Measures Agreement extend into the SACO-related costs and the realignment-related costs.
 2: The SACO-related costs refer to the costs for implementing the contents of the SACO Final Report to reduce the impact on Okinawa, while the realignment-related costs refer to the costs relating to measures to contribute to reducing the impact on local communities as part of the realignment initiatives. Since the cost sharing for the stationing of USFJ is Japan's voluntary effort to bear some costs in light of the importance of ensuring the smooth and effective implementation of the Japan-U.S. Security Arrangements, its nature is different from the SACO-related costs and the realignment-related costs, and is categorized separately.
 3: The costs for the stationing of USFJ include the MOD-related budget, other ministry-related budgets (base subsidy, etc.): ¥40.4 billion, FY2020 Budget) and the estimated costs of government-owned land provided for use as USFJ facilities (¥164.2 billion, FY2020 Estimated Costs).
 4: Numbers may not add up due to rounding.

Fig. III-2-4-2 Japan's Share under the Current SMA Extended by the Protocol Amending the SMA

Japan's share under the current SMA extended by the Protocol Amending the SMA	[SMA]	Effective Period	The current SMA effective since April 1, 2016 is extended for one year (until March 31, 2022).
		Labor Costs	The upper limit of the number of workers funded by Japan will remain unchanged at 23,178, the same as the upper limit in FY2020.
		Utilities Costs	The percentage of the annual utilities costs funded by Japan will remain unchanged at 61%. The upper limit of the annual utilities costs funded by Japan will remain unchanged at approximately 24.9 billion yen.
		Training Relocation Costs	The framework under the current SMA will remain unchanged.
	[Costs for Facilities Improvement Program (FIP)]		Based on the decision that the amount of costs will not fall below 20.6 billion yen in each fiscal year during the current SMA period, the amount will remain unchanged in FY2021.

Japan has been reviewing HNS, paying full attention to its tight fiscal conditions, and as a result, HNS has been on a steady decline after peaking out in the FY1999 budget on an expenditure basis.

5 One Year Extension to the Current SMA

Based on the fact that the current SMA was valid until the end of March 2021 and as a result of discussions between Japan and the United States, on February 17, 2021, the Governments of Japan and the United States

agreed to extend the current SMA for one year, and also confirmed that negotiations would be continued towards the agreement of a new SMA beyond April 1, 2022. In addition, on February 24, 2021, the Protocol Amending the SMA was signed to extend the validity period of the current SMA by one year. After the approval by the Diet, the Protocol Amending the SMA came into effect on March 31, 2021, and the validity period of the current SMA was extended by one year.


See Fig. III-2-4-2 (Japan's Share under the Current SMA Extended by the Protocol Amending the SMA)

2 Progress of the Realignment of the USFJ

“The United States-Japan Roadmap for Realignment Implementation” (Roadmap) was set forth in May 2006. Subsequently, the following factors were set forth: (1) The necessity of implementing measures to realize visible mitigation of the impact on Okinawa promptly and steadily; (2) The necessity of balancing the realignment package and the strategic rebalance to the Asia-Pacific region, which was set out in the U.S. Defense Strategic Guidance released in January 2012; and (3) The reduction in the cost associated with the relocation of the U.S. Marine Corps to Guam demanded by the U.S. congress. Full-fledged consultation on the coordination of the realignment package took place between the two countries in light of those factors. The achievements thereof were announced as part of the Joint Statements of the “2+2” Meeting and through other means.

The 2006 Roadmap stated that, among the III Marine

Expeditionary Force (MEF) stationed in Okinawa, the main focus of the relocation to Guam would be the command elements, but at the “2+2” Meeting in April 2012, the United States decided to alter the composition of the units and to deploy the Marine Air-Ground Task Force (MAGTF)—consisting of command, ground, aviation and logistics support elements—in Japan, Guam, and Hawaii, as well as in Australia as a rotational unit. In addition, the governments of Japan and the United States decided to delink both the relocation of U.S. Marine Corps personnel from Okinawa to Guam and the resulting land returns south of Kadena Air Base from the progress on the Futenma Replacement Facility (FRF).

 See Reference 21 (United States-Japan Roadmap for Realignment Implementation [tentative translation])
Fig. III-2-4-3 (Progress of the Realignment of Force Structure of USFJ and the SDF Described in the “United States-Japan Roadmap for Realignment Implementation”-1 and 2)


3 Stationing of the U.S. Forces in Okinawa

In comparison to areas such as the U.S. mainland, Hawaii, and Guam, Okinawa is located closer to potential conflict areas that could affect Japan’s peace and security, including the Korean Peninsula and the Taiwan Strait, but at the same time has the advantage of having a certain distance from these areas that would not heighten military tension there unnecessarily. In addition, Okinawa, comprising a large number of small islands, is located roughly in the center of the Southwestern Islands having a total length of some 1,200 km and close to key sea lanes for Japan, which depends on marine transportation for over 99% of its overall international trade. Furthermore, its location is extremely important from the perspective of security, as Okinawa serves as a strategically important target for neighboring countries in both making access to the Pacific from the continent and rejecting access from the Pacific to the continent.

Thus, the stationing of the U.S. Forces in Okinawa, including the U.S. Marine Corps, which can deal with a wide range of missions with high mobility and readiness, along with the above-mentioned geographical characteristics, further ensures the effectiveness of the Japan-U.S. Alliance, strengthens deterrence, and contributes greatly not only to the security of Japan but also to the peace and stability of the Indo-Pacific region.

On the other hand, Okinawa has many USFJ facilities and areas such as air bases, maneuver areas and logistics facilities. As of January 1, 2021, approximately 70% of USFJ facilities and areas (for exclusive use)

are concentrated in Okinawa Prefecture, occupying approximately 8% of the land area of the prefecture and approximately 14% of the main island of Okinawa. Therefore, it is necessary to make utmost efforts to mitigate the impact on Okinawa, while also considering the above-mentioned security standpoints.

 See Fig. III-2-4-4 (The Geopolitical Positioning of Okinawa and the Significance of the U.S. Marine Corps Stationed in Okinawa [image])
Fig. III-2-4-5 (Location of Major U.S. Forces Stationing in Okinawa [As of March 31, 2020])

1 Initiatives for Realignment, Consolidation, and Reduction of USFJ Facilities and Areas in Okinawa

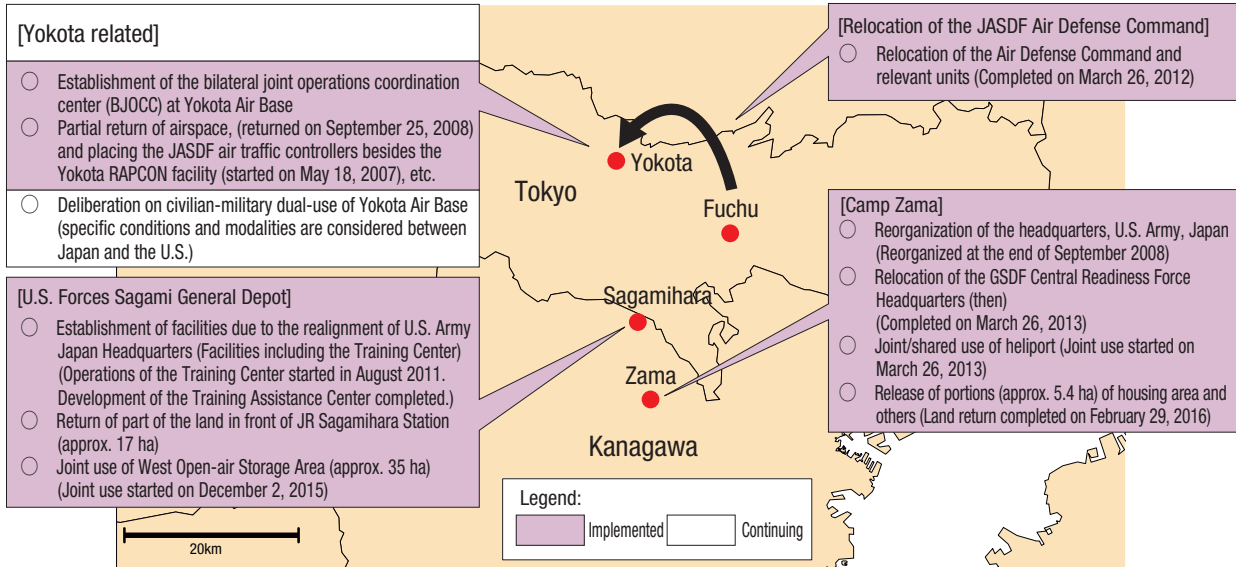
When Okinawa was returned to Japan in 1972, the Government of Japan provided 83 facilities and areas covering approximately 278 km² for exclusive use as USFJ facilities and areas. On the other hand, USFJ facilities and areas were strongly requested to be realigned, consolidated and reduced, on the grounds that they seriously affect the lives of people in Okinawa Prefecture.

Both countries have continued their initiatives to realign, consolidate, and reduce USFJ facilities and areas, centering on those subject to the strong local requests, and, in relation to the so-called 23 issues, it was agreed in 1990 that both sides would proceed with the required coordination and procedures toward the return of land.

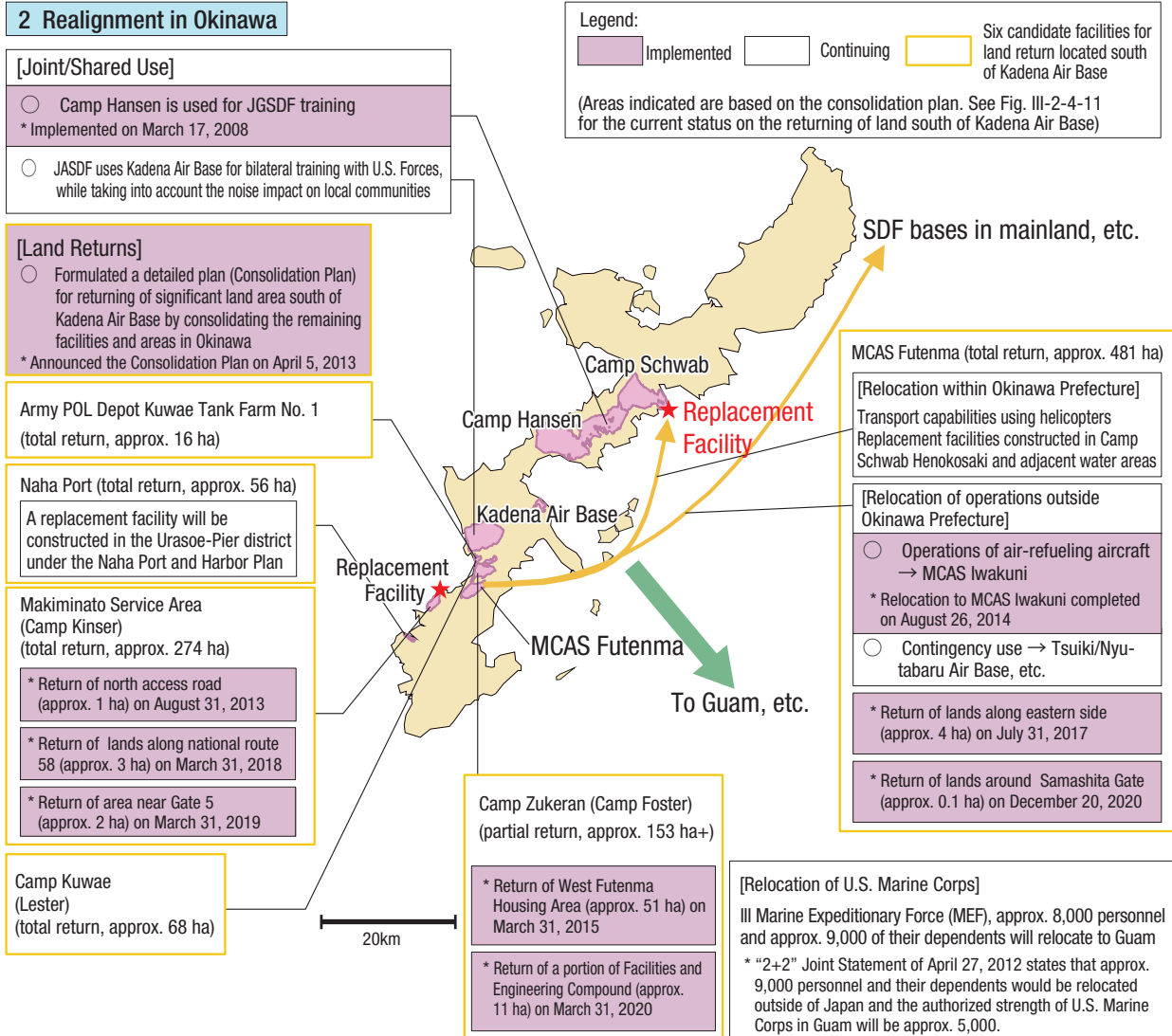
Fig. III-2-4-3

Progress of the Realignment of Force Structure of USFJ and the SDF Described in the "United States-Japan Roadmap for Realignment Implementation"-1

1 Realignment in the Kanto Area



2 Realignment in Okinawa

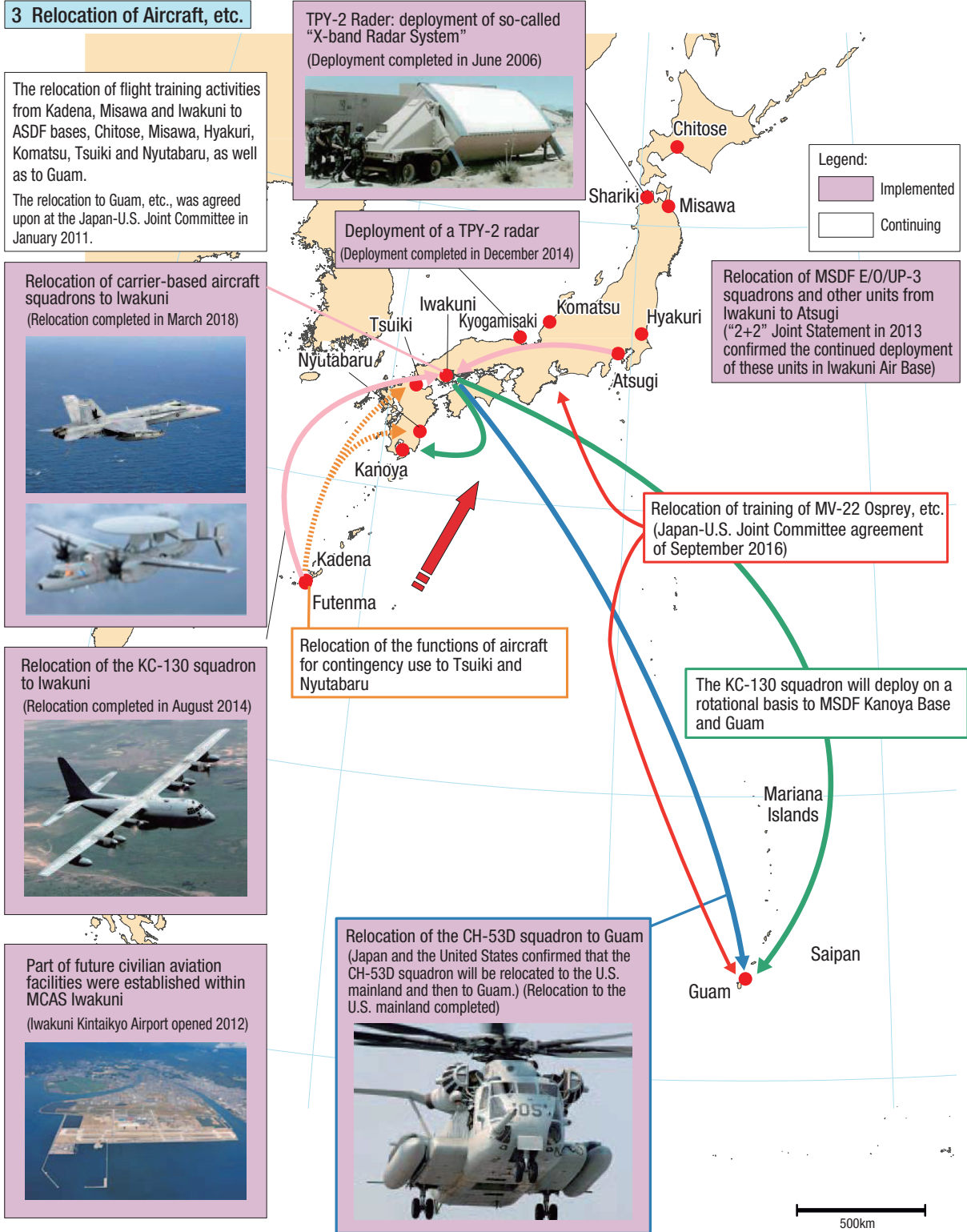


Moreover, it was agreed in 1995 that initiatives would also be made to resolve the so-called Three Okinawa Issues: the return of Naha Port (Naha City), the return of

Yomitan Auxiliary Airfield, and the relocation of artillery live-fire training over Highway 104.

Subsequently, in response to an unfortunate incident

Fig. III-2-4-3 Progress of the Realignment of Force Structure of USFJ and the SDF Described in the "United States-Japan Roadmap for Realignment Implementation"-2



that occurred in 1995, as well as the refusal of the then Governor of Okinawa to sign land lease renewal documents under the Act on Special Measures for USFJ Land Release, the Government of Japan decided to devote even greater initiatives towards realignment, consolidation, and reduction, believing that the impact should be shared by the whole nation. In order to hold consultations on issues related to USFJ facilities and

areas in Okinawa, the Government of Japan established the Okinawa Action Council between the central government and Okinawa Prefecture, and the Special Action Committee on Okinawa (SACO) between Japan and the United States, and the so-called SACO Final Report was compiled in 1996.

See Reference 22 (Outline of 23 Issues)

Fig. III-2-4-4

The Geopolitical Positioning of Okinawa and the Significance of the U.S. Marine Corps Stationed in Okinawa (image)

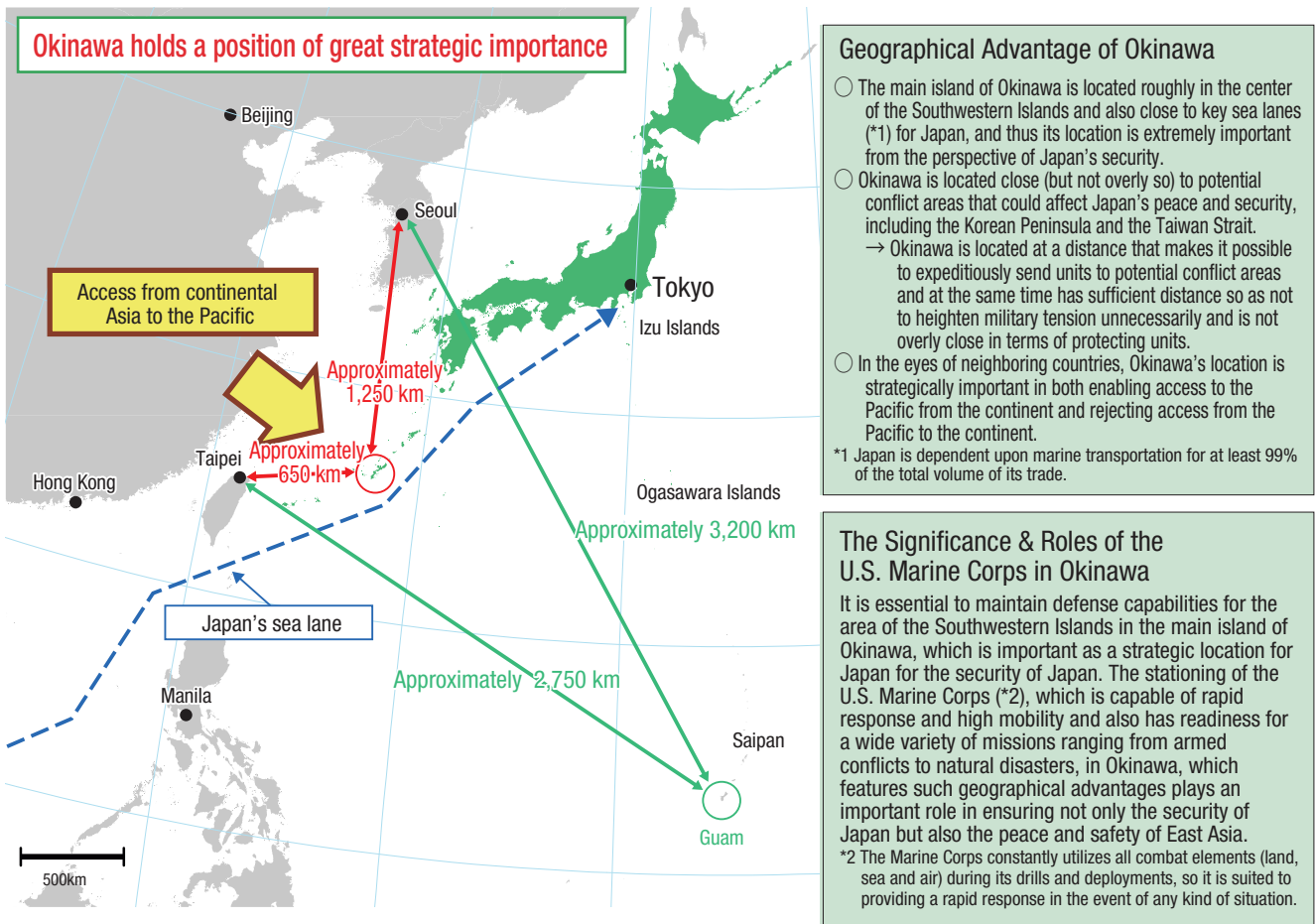
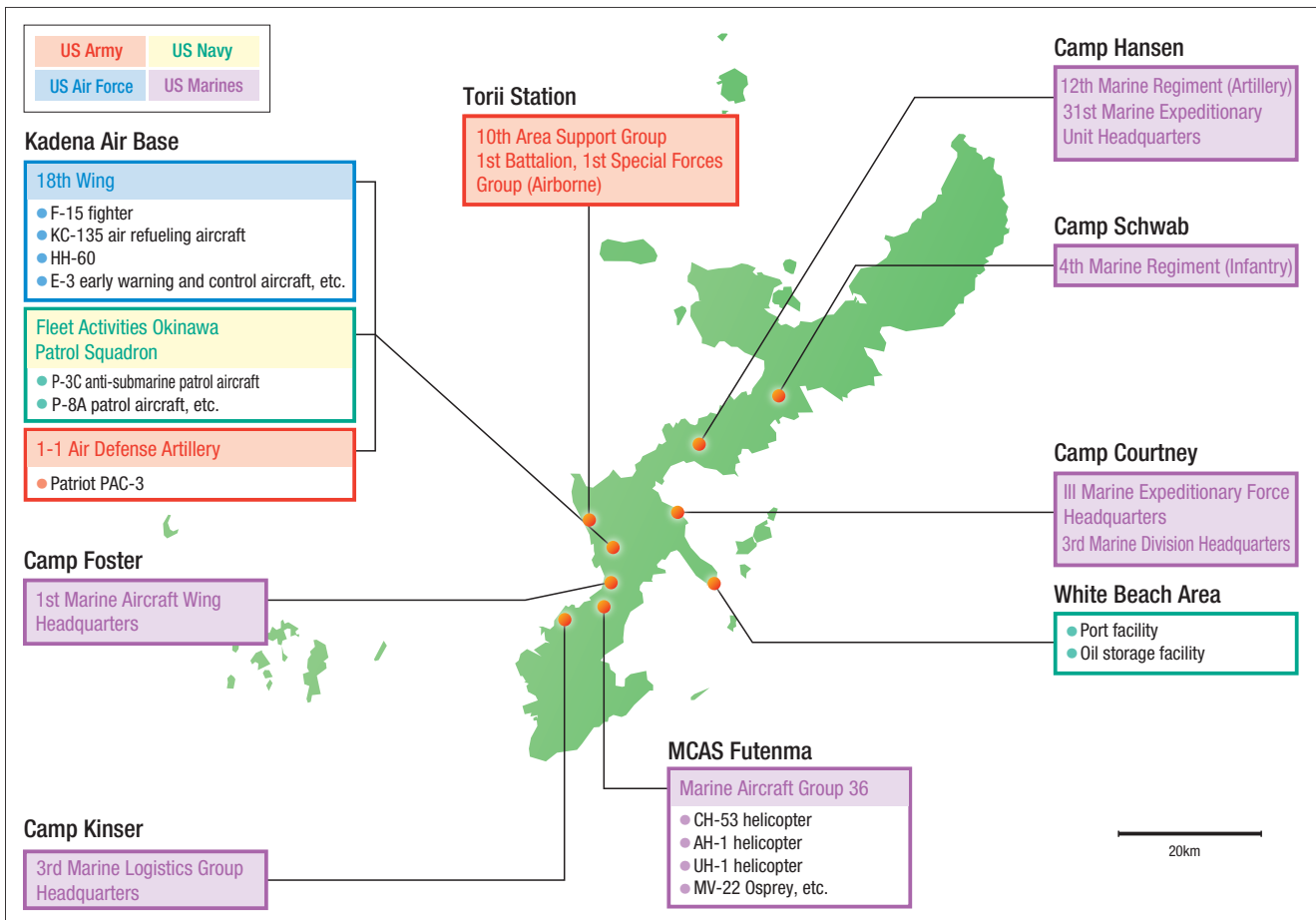


Fig. III-2-4-5

Location of Major U.S. Forces Stationing in Okinawa (As of March 31, 2020)



Note: Based on information on the U.S. Forces Japan website and other sources.

Fig. III-2-4-6

Facilities and Areas Related to the SACO Final Report (image)

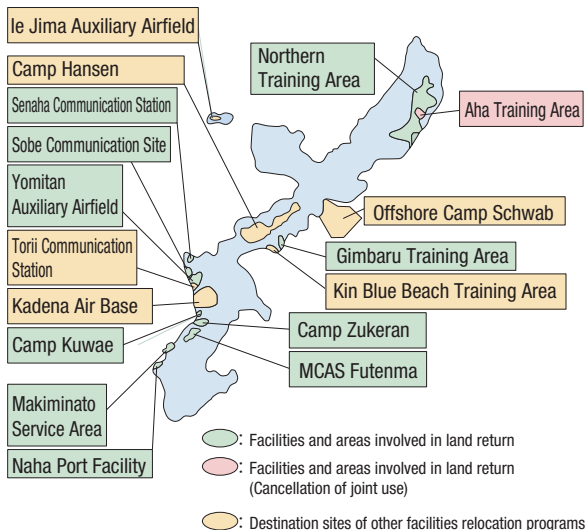
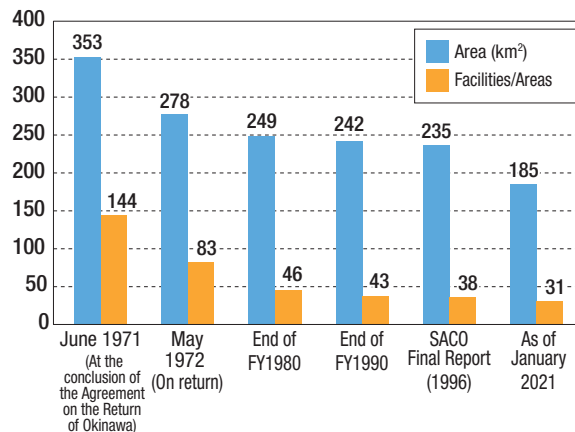


Fig. III-2-4-7

Changes in Number and Area of the USFJ Facilities and Areas (Exclusive Use) in Okinawa



2 Outline of SACO Final Report

The SACO Final Report stipulates the return of land, the adjustment of training and operational procedures, noise reduction, and the improvement of operational procedures regarding the SOFA procedures, and also refers to the related facilities and areas covered. The land to be returned based on the SACO Final Report represents approximately 21% (about 50 km²) of USFJ facilities and areas in Okinawa at that time, exceeding the amount of land returned during the period between the reversion of Okinawa and the implementation of the SACO Final Report, which is roughly 43 km².

See Reference 23 (The SACO Final Report [tentative translation])
 Reference 24 (Progress of the SACO Final Report)
 Fig. III-2-4-6 (Facilities and Areas Related to the SACO Final Report [image])
 Fig. III-2-4-7 (Changes in Number and Area of the USFJ Facilities and Areas [Exclusive Use] in Okinawa)

3 Return of a Major Portion of the Northern Training Area

The condition for returning the Northern Training Area was to relocate seven helipads in the area to be returned to the preexisting training area. However, the Government of Japan reached an agreement with the U.S. side to give considerations for the natural environment and to relocate not all seven but the minimum number of six helipads necessary, and proceeded with the construction work. The relocation of the helipads completed in December 2016, and the return of approximately 4,000 ha, a major portion of the Northern Training Area located in the villages of Kunigami and Higashi, was achieved based on the SACO Final Report.

The returned land accounts for approximately 20% of USFJ facilities and areas (for exclusive use) in Okinawa. The return is the largest one since the reversion of Okinawa to the mainland, and had been an issue for 20 years since the SACO Final Report in 1996.

Based on the Act on Special Measures Concerning Promotion of Effective and Appropriate Use of the Lands in Okinawa Prefecture Previously Provided for Use by the Stationed Forces, the MOD took measures to remove obstacles (such as soil contamination survey, etc.) so that the landowners, etc., could use returned lands effectively and appropriately, and transferred the land to the landowners in December 2017.

4 Relocation and Return of MCAS Futenma

In May 2006, along with the initiatives set forth in the Roadmap related to the realignment of the U.S. Forces, the measures have been implemented to alleviate the impact on the local communities in Okinawa while maintaining the deterrence capabilities.

The Government of Japan believes that it is imperative not to allow MCAS Futenma to remain indefinitely at its current location, which is in the vicinity of houses, schools, etc., in the center of Ginowan City, Okinawa Prefecture, and considers that this is a fundamental idea shared between the Government of Japan and the people of Okinawa.

As for the relocation of MCAS Futenma, the Government of Japan has not changed its stance that the current plan to construct the FRF at the Camp Schwab Henokosaki area (Nago City) and adjacent waters is the only solution to avoid the continued use of MCAS Futenma.

The Government of Japan will make further efforts to achieve the relocation and return of MCAS Futenma as early as possible and to mitigate the impact on Okinawa in a speedy manner. The return of MCAS Futenma is

expected to eliminate danger in the area and to contribute to the further growth of Okinawa, including Ginowan City, through the reuse of the area (approximately 476 ha with a land area 100 times larger than Tokyo Dome).

(1) Background Concerning the Futenma Replacement Facility

Considering the occurrence of the U.S. Forces helicopter crash in Ginowan City in August 2004, bilateral discussions on the realignment have been made towards realizing the relocation and return of MCAS Futenma at the earliest possible date in order to resolve the concern of the residents living in the vicinity.

In the SCC (“2+2”) document compiled in October 2005, the initiative to “locate the FRF in ‘L’-shaped configuration that combines the shoreline areas of Camp Schwab and adjacent water areas of Oura Bay” was approved. However, since this L-shape meant that U.S. military aircraft would fly over settlements in Nago City and Ginoza Village, a request was submitted to avoid flights over these settlements.

In light of this, based on negotiation and agreement with the local municipalities including Nago City, it was decided to stipulate in the Roadmap that the FRF be located in a V-shape configuration that “combines Henokosaki and adjacent water areas of Oura and Henoko Bays.” With regard to construction of this replacement facility, “a Memorandum of Basic Understanding” was exchanged between the then Governor of Okinawa Inamine and the then Minister of State for Defense Nukaga in May 2006.

After the change of government in September 2009, the Exploratory Committee for Okinawa Base Issues was established. After reviews conducted by the Committee, both governments, at the “2+2” Meeting held in May 2010, confirmed the intention to locate the FRF in the Camp Schwab Henokosaki area and the adjacent waters, and decided that a study by experts regarding the replacement facility’s location, configuration and construction method would be completed promptly. The two sides also agreed to take concrete measures to mitigate the impact on Okinawa. Subsequently, at the “2+2” Meeting held in June 2011, it was decided that the runway would take a V-shape.

During the deliberation process which led to these conclusions, first of all, it was determined that, from a security perspective, the deterrence of the U.S. Forces, including that of the U.S. Marine Corps stationed in Okinawa that is located in a crucial area for the security of Japan, cannot be lessened while there remains instability and uncertainty in the security environment in East Asia. Furthermore, concern was expressed that the functions of the U.S. Marine Corps such as mobility

and readiness would be weakened if the helicopter units stationed at MCAS Futenma were to be detached from the other Marine units stationed in Okinawa and moved abroad or out of the prefecture. Therefore, it was concluded that the FRF had to be located within Okinawa Prefecture.

Also at the “2+2” Meetings in April 2012, October 2013, April 2015, August 2017, April 2019, and March 2021, and in other instances including the joint statement issued at the Japan-U.S. summit meeting in February and November 2017, April 2018, and April 2021, the governments of Japan and the United States confirmed that the plan to construct the FRF at Camp Schwab Henokosaki area and adjacent waters is the only solution that avoids the continued use of MCAS Futenma.

 See Reference 25 (Background of the Futenma Replacement Facility)

Reference 26 (Estimated Timelines for the Return of Facilities and Areas South of Kadena)

Fig. III-2-4-8 (Comparison between the Replacement Facility and MCAS Futenma [image])

(2) Relocation of MCAS Futenma and Mitigation of the Impact on Okinawa

The relocation of MCAS Futenma holds more significance than merely moving the facility from one location to another. Rather, it involves reduction in the base’s functions and area in Okinawa, and contributes greatly to mitigating the impact on Okinawa.

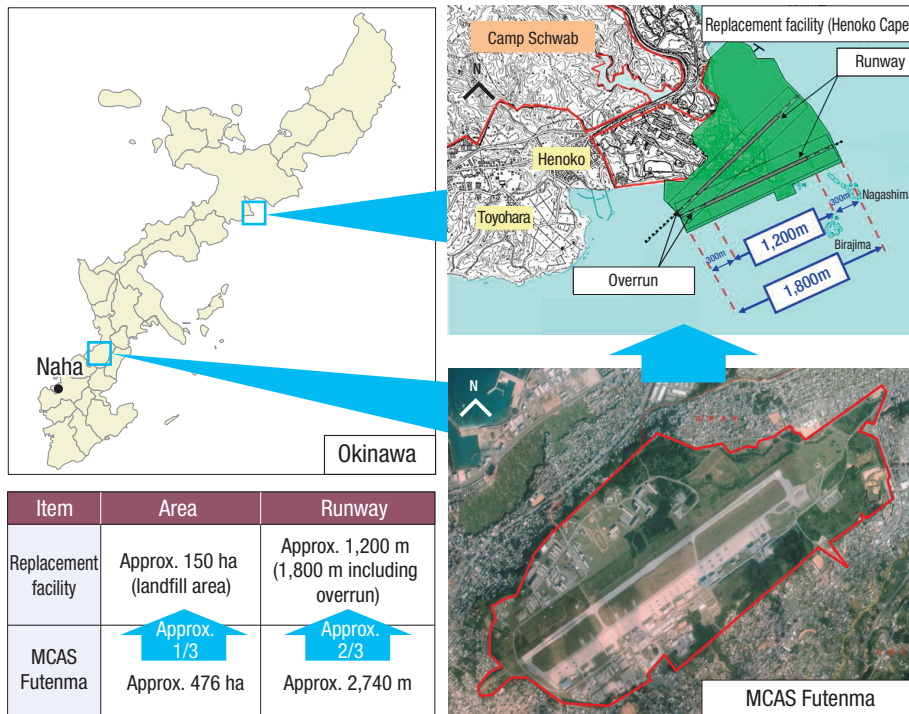
a. Distribution of Functions Offered by MCAS Futenma

MCAS Futenma fulfills the following functions relating to the aviation capabilities of the U.S. Marine Corps stationed in Okinawa: (1) Operation of the Osprey and other aircraft; (2) Operation of air refueling aircraft; and (3) Accepting transient aircraft in contingencies. Of these three functions, only “(1) operation of the Osprey and other aircraft” will be relocated to Camp Schwab. As for “(2) operation of air refueling aircraft,” all 15 KC-130 air refueling aircraft were relocated to MCAS Iwakuni (in Iwakuni City, Yamaguchi Prefecture) in August 2014.

This marked the completion of a task that has remained unresolved for 18 years since the SACO Final Report in 1996, enabling a vast majority of fixed-wing aircraft located in MCAS Futenma to be moved outside Okinawa Prefecture. This move also led to the relocation of approximately 870 USFJ personnel, civilian employees, and dependents.

Moreover, the function of “(3) accepting transient aircraft in contingencies” will also be transferred to Tsuiki Air Base and Nyutabaru Air Base. In October 2018, Japan and the United States agreed on developing facilities that would be necessary for relocating the function, and related work such as construction of the facilities has been carried out.

Fig. III-2-4-8 Comparison between the Replacement Facility and MCAS Futenma (image)



b. Reduction in Area

The area required for the land reclamation to build the FRF is approximately 150 ha, less than one-third of the approximately 476 ha of MCAS Futenma, and the FRF will be equipped with a significantly shorter runway at 1,200 m (1,800 m including the overruns) compared to the current runway length of 2,740 m at MCAS Futenma.

c. Reduction in Noise and Risks

Two runways will be constructed in a V-shape, which enables the flight path for takeoff and landing to be located over the sea, in line with the requests of the local community. In MCAS Futenma, flight paths used daily for training and other purposes are located over residential areas, whereas flight paths in the FRF will be changed to over the sea, thereby reducing noise and risks.

For example, while more than 10,000 households are located in areas requiring housing noise insulation near MCAS Futenma, there will be zero households requiring such insulation around the FRF. This means that the noise levels experienced by all households will comply with the environment criteria applied to exclusive housing areas. In the case that an aircraft encounters any contingency, safety on the ground can be ensured by diverting the aircraft offshore.

(3) The Necessity of Constructing the FRF in Okinawa Prefecture

The U.S. Maritime Corps in Okinawa consists of air, ground, logistics, and command elements. The interaction of those elements is indispensable for U.S. Marine Corps operations characterized by great mobility and readiness, so the FRF needs to be located within Okinawa Prefecture so that rotary-wing aircraft stationed at MCAS Futenma will be located near the elements with which they train, operate, or otherwise work on a regular basis.

(4) Completion of Environmental Impact Assessment Procedures

The MOD sent the environmental impact assessment scoping document in 2007 to the Governor of Okinawa and other parties. After the MOD worked on revising the document based on the opinions provided by the governor, the MOD completed the environmental impact assessment procedures by sending the revised assessment document to related parties including the governor in December 2012, while making the assessment document available for public review.

Throughout these procedures, the MOD received a total of 1,561 opinions from the Governor of Okinawa on six occasions, made all the required revisions, and reflected them in the content of the environmental assessment. In this way, the MOD had taken steps to comply with relevant laws, asked opinions and ideas from Okinawa Prefecture over a sufficient period of time, and reflected them in the assessment.

(5) Promotion of the FRF Construction Project

a. Suits over the Revocation of the Landfill Permit

The Director General of the Okinawa Defense Bureau submitted the landfill permit request on public waters to Okinawa Prefecture in March 2013, and then Governor of Okinawa Nakaima approved this in December 2013. However, then Governor of Okinawa Onaga revoked the landfill permit in October 2015, leading to the filing of three suits over the revocation of the landfill permit between the Government of Japan and Okinawa Prefecture.⁶

Under these circumstances, the court came up with a settlement recommendation, and the Government of Japan and Okinawa Prefecture reached a court-mediated settlement agreement in March 2016. In the settlement, the Government of Japan and Okinawa mutually affirmed that after the final judicial ruling is handed down by the Supreme Court, they would abide by the ruling and take steps in line with the spirit of the text of the ruling and the reasons conducive to the text, and continue to take responses in good faith by cooperating with each other in accordance with the purpose of the ruling.

Pursuant to the provisions of the settlement agreement, the Okinawa Defense Bureau immediately suspended the landfill work while the Minister of Land, Infrastructure, Transport and Tourism issued an instruction for correction based on the Local Autonomy Act to then Governor Onaga to repeal the revocation of the landfill permit. Subsequently, in December 2016, after examination by the Central and Local Government Dispute Management Council and deliberation by the Naha Branch of the Fukuoka High Court, the Supreme Court set forth the decision that the revocation of the landfill permit by then Governor Onaga was illegal.

b. Judgment of the Supreme Court

In the judgment, the Supreme Court ruled that then Governor Nakaima's decision was not illegal. The court stated that no circumstances could be found indicating that then Governor Nakaima's decision that the landfill was in compliance with the condition in Article 4 (1) (i) of the Act on Reclamation of Publicly-owned Water Surface, "that it is appropriate and reasonable as the use of national land," had no foundation in fact, or clearly lacked reasoning under socially accepted conventions. The reasons given by the court include: (1) the area of the replacement facilities and the landfill area will be significantly reduced from the area of the MCAS Futenma facilities, and (2) flights over residential areas by aircraft can be avoided by the landfill in the coastal area that puts

the runway extension out to sea.

Moreover, regarding whether the construction of replacement facilities takes environmental protection and other considerations into adequate account, the Supreme Court, finding that construction methods, environmental protection measures and countermeasures that can conceivably be taken at this point in time have been taken and that there is sufficient consideration for disaster prevention. The Supreme Court determined that it cannot be said that then Governor Nakaima's decision was illegal. The court did not find that there was anything particularly unreasonable in then Governor Nakaima's decision-making process and the content of the decision that the construction met the condition of Article 4 (1) (ii) of the Act on Reclamation of Publicly-owned Water Surface, "the landfill gives sufficient consideration to the protection of the environment and prevention of disasters."

c. Retraction of the Revocation of the Landfill Permit

Following this Supreme Court ruling, in December 2016, then Governor Onaga retracted the revocation of the landfill permit and the Okinawa Defense Bureau resumed the replacement facilities construction project. In April 2017, it started the construction of the seawall, the main part of the public waters reclamation.

d. Suit Related to Damage to the Reefs on the Seafloor, etc.

In July 2017, Okinawa Prefecture filed a suit in the Naha District Court, requesting that this seawall construction not be allowed to damage to the reefs on the seafloor, etc., without permission from the Governor of Okinawa based on the regulations of Okinawa Prefecture. Subsequently, the district court dismissed Okinawa Prefecture's claim in March 2018, and the Naha Branch of the Fukuoka High Court dismissed Okinawa Prefecture's appeal in December of the same year. In the same month, Okinawa Prefecture filed a petition of final appeal with the Supreme Court, but withdrew the petition in March 2019.

e. Situation Surrounding the Landfill Work

In August 2018, Okinawa Prefecture revoked the landfill permit again on the basis of problems concerning environmental protection measures and the soil foundation of the landfill area. In October of the same year, the Director General of Okinawa Defense Bureau filed a request with the Minister of Land, Infrastructure, Transport and Tourism for a stay of execution under the Administrative Complaint Review Act against the revocation of the permit, and the stay of execution was upheld. Following the ruling, the Okinawa Defense Bureau started the landfill operation in December of

⁶ (1) The suit filed by the Government of Japan (the Minister of Land, Infrastructure, Transport and Tourism) as plaintiff based on the provisions of Article 245-8 of the Local Autonomy Act, seeking a court ruling instructing a retraction of the revocation of the landfill permit by then Governor Onaga (the so-called subrogation suit); (2) the suit filed by the Governor of Okinawa Prefecture based on the provisions of Article 251-5 of the Local Autonomy Act, seeking to invalidate the decision to suspend the validity of the revocation of the landfill permit (the decision to stay execution) by the Minister of Land, Infrastructure, Transport and Tourism as the illegal "involvement of the state;" and (3) the suit filed by Okinawa Prefecture based on the provisions of Article 3 of the Administrative Case Litigation Act, seeking to invalidate the decision to stay execution by the Minister of Land, Infrastructure, Transport and Tourism.

the same year in the waters south of Camp Schwab. In April 2021, the landfilling from sea level to 3.1 m was completed, and landfill operations are steadily progressing. (As of May 2021)

In April 2019, the Minister of Land, Infrastructure, Transport and Tourism determined that the revocation of the landfill permit by Okinawa Prefecture should be repealed. Dissatisfied with this decision, the Governor of Okinawa filed a request for a review with the Central and Local Government Dispute Management Council in the same month. The Council dismissed this request in June 2019. In July 2019, protesting the dismissal of the Council, the Governor of Okinawa filed a lawsuit with the Naha Branch of the Fukuoka High Court to revoke the government's involvement (determination by the Minister of Land, Infrastructure, Transport and Tourism), and in August 2019 filed a suit with the Naha District Court seeking the revocation of the determination by the Minister of Land, Infrastructure, Transport and Tourism.

Of these suits, in October of the same year the Naha Branch of the Fukuoka High Court dismissed the suit by the Governor of Okinawa to revoke the government's involvement, and the Governor of Okinawa filed a petition for the Supreme Court to take up the appeal, but in March 2020 the Supreme Court rejected the request by the Governor of Okinawa. On the other hand, with regards to the suit to revoke the ruling, in November 2020 the Naha District Court dismissed the request by Okinawa Prefecture, but in December 2020 Okinawa Prefecture appealed to the Naha Branch of the Fukuoka High Court.

In implementing the relocation, the MOD has conducted environmental impact assessment procedures for approximately five years and has given the utmost consideration for the natural environment. Throughout the procedures, more than 1,500 opinions have been expressed by the Governor of Okinawa on six occasions, all of which the MOD reflected in the environmental assessment.

If the waters are enclosed by the seawall, the coral will be isolated from the surrounding sea with the flow of seawater shut down, a situation which will affect the coral habitat. Therefore, corals living in the landfill area on the southern side, which were designated for conservation, were transplanted before the area was enclosed. The standard for conservation of corals is stricter than the standard that was applied to the landfill related to the second runway of Naha Airport.⁷ Regarding coenobita, which are a nationally designated protected species, and the shellfish and crustaceans designated as endangered species, relocation from the seashore and seafloors in the construction area on the southern side to other areas is also being appropriately implemented based on instructions and advice from experts.

Regarding the soil foundation of the landfill area, as a result of a study conducted on the stability of seawalls and other structures in the waters north of Camp Schwab in light of the results of a boring survey, it has been confirmed that although the work to improve the soil foundation is necessary, it is possible to implement the construction of seawalls and landfill while ensuring the required stability through prevailing and adequately proven construction methods.⁸ Since September 2019, the Technical Review Committee on Futenma Replacement Facility Construction Project, consisting of experts in the fields of geotechnical, structural, coastal, and pavement engineering, has been held to obtain objective technical recommendations and advice in order to make the design, construction, and maintenance of seawalls and landfill sites more rational for the future implementation of the project.

In December 2019, the Okinawa Defense Bureau announced that, based on the results of the studies that had been conducted so far, it would take nine years and three months from the commencement to the completion of construction according to the revised plan, and about 12 years to complete the "admin procedures" described in the Okinawa Consolidation Plan and a fund of about 930 billion yen. Hearing experts' insights on the environment and others, after due consideration, in April 2020, the

November 2018



May 2021



The progress of landfill construction in the waters south of Camp Schwab

⁷ Specifically, in relation to the construction of the second runway of Naha Airport, around 37,000 clusters of small corals were transplanted. If the same standard as the one applicable to the construction of the alternative facility was applied, the number of clusters of small corals transplanted would have been around 170,000.

⁸ The standard methods are the sand compaction pile method, the sand drain method, and the paper drain method. Among examples of projects in which these methods were used is the construction work to expand Tokyo International Airport (Haneda Airport).

Okinawa Defense Bureau submitted to the Governor of Okinawa Prefecture the Landfill Permit Revision Request given the additional implementation of the soil improvement work, etc., based on the Act on Reclamation of Publicly-owned Water Surface.

In February 2019, Okinawa Prefecture held a referendum on whether or not to support the landfill work related to the relocation of MCAS Futenma to the Henokosaki area in Nago City. As a result, 114,933 voters voted for the work, 434,273 voters voted against it, and 52,682 voters voted neither (the total number of votes cast was 605,385 and the voter turnout was 52.48%). The present situation in which U.S. bases are concentrated in Okinawa is in no way acceptable, and it is a grave responsibility of the government to mitigate the impact on Okinawa. The government takes the results of the prefectural referendum seriously and will continue to do its utmost to mitigate the impact of the U.S. bases in Okinawa.

It is imperative to prevent MCAS Futenma, which is surrounded by houses and schools and which is said to be the most dangerous base in the world, from continuing to be used indefinitely and to pose a danger. The government believes that this view is shared with the people of Okinawa.

The relocation to Henoko does not mean that all functions of MCAS Futenma will be relocated there. Of MCAS Futenma's three functions, two will be moved out of Okinawa while the remaining one will be relocated to Henoko, resulting in the total return of the site of MCAS Futenma. Indeed, from the viewpoint of sharing the impact, progress is being made in implementation of measures to realize the total return of the site of MCAS Futenma based on understanding and cooperation by local public entities outside Okinawa. The measures include the relocation of air refueling aircraft to Yamaguchi Prefecture and the relocation of the function of accepting transient aircraft in contingencies to Fukuoka and Miyazaki Prefectures.

Although 25 years have passed since Japan and the United States agreed on the total return of the site of MCAS Futenma, it has not been achieved yet. The MOD believes that the return must not be postponed any longer. The Government of Japan intends to continue making efforts to secure the understanding of local residents in Okinawa through years of persistent dialogue, and do its utmost to achieve the total return of MCAS Futenma as early as possible.

5 Force Reduction and Relocation to Guam

Since the Roadmap was announced in May 2006, the governments of Japan and the United States held a

series of consultations on the reduction of the U.S. Forces in Okinawa.

(1) Timing and Size of Relocation

The 2006 Roadmap stated that approximately 8,000 personnel of the III MEF and their approximate 9,000 dependents would relocate from Okinawa to Guam by 2014, but the "2+2" Meeting in June 2011 and other agreements set the timing of the relocation for the earliest possible date after 2014.

Subsequently, at the "2+2" Meeting held in April 2012, the governments of Japan and the United States decided to delink both the relocation of III MEF personnel from Okinawa to Guam and the resulting land return south of Kadena Air Base from the progress on the FRF and to adjust the composition of the units and the number of personnel to be relocated to Guam.

As a result, MAGTF is to locate in Japan, Guam, and Hawaii, approximately 9,000 personnel are to be relocated to locations outside of Japan (about 4,000 of whom are to be relocated to Guam), the authorized strength of the U.S. Marine Corps forces in Guam is to be approximately 5,000 personnel, and an end-state for the U.S. Marine Corps presence in Okinawa is to be consistent with the level of approximately 10,000 personnel envisioned in the Roadmap.

Accordingly, the "2+2" Meeting held in October 2013 agreed that, under the relocation plan described at the 2012 "2+2" Meeting, the relocation of U.S. Marine Corps units from Okinawa to Guam is to begin in the first half of the 2020s. The plan is expected to facilitate progress in implementing the consolidation plan for facilities and areas in Okinawa of April 2013.

(2) Costs of the Relocation

Under the Roadmap, the two sides reached an agreement that, of the estimated US\$10.27 billion (in U.S. fiscal year 2008 dollars) cost of the facilities and infrastructure development costs, Japan would provide US\$6.09 billion, including US\$2.8 billion in direct cash contribution, while the United States would fund the remaining US\$4.18 billion. In February 2009, the Japanese Government and the U.S. Government signed "the Agreement Between the Government of Japan and the Government of the United States of America Concerning the Implementation of the Relocation of the III MEF Personnel and Their Dependents from Okinawa to Guam" (the Guam International Agreement). The Agreement legally guarantees and ensures actions taken by Japan and the United States for projects to which Japan provides direct cash contributions.

As part of measures based on this Agreement, the Japanese Government has been providing cash

contributions to the U.S. Government in relation to the projects for which Japan has provided financial support since FY2009.⁹

Subsequently, at the “2+2” Meeting held in April 2012, the unit composition and the number of personnel to be relocated to Guam were adjusted and it was agreed that the preliminary cost estimate by the U.S. Government for the relocation was US\$8.6 billion (in U.S. FY2012 dollars). With regard to Japan’s financial commitment, it was reaffirmed that it was to be the direct cash contribution of up to US\$2.8 billion (in U.S. FY2008 dollars) as stipulated in Article 1 of the Guam International Agreement. It was also confirmed that Japan’s equity investment and loans for family housing projects and infrastructure projects would not be utilized.¹⁰

Moreover, it was stipulated that any funds that had already been provided to the U.S. Government under the Guam International Agreement would be counted as part of the Japanese contribution. Furthermore, as a new initiative, a portion of the direct cash contribution of US\$2.8 billion mentioned above would be used to develop training areas in Guam and the Commonwealth of the Northern Mariana Islands as shared-use facilities by Japan and the United States. In addition, it was agreed that the remaining costs and any additional costs would be borne by the United States, and that the two governments were to complete a bilateral cost breakdown.

At the “2+2” Meeting in October 2013, a Protocol Amending the Guam International Agreement was also signed to add the stipulations concerning the development of training areas in Guam and the Commonwealth of the Northern Mariana Islands, and the use of these training areas by the SDF. The limit on Japanese cash contributions remains unchanged at US\$2.8 billion (in U.S. FY2008 dollars). Both countries also completed work reflecting the breakdown of the associated costs.

Furthermore, the National Defense Authorization Act for U.S. FY2015 was enacted in December 2014, which lifted the freeze on the use of funds for the relocation to Guam imposed by the U.S. Congress in U.S. FY2012.

(3) Completion of Environmental Impact Assessment Procedures

As for the environmental impact assessment for Guam, the required procedures were conducted to reflect the revisions to the project made by the adjustments to the plan for realignment, and the assessment was completed in August 2015.

Furthermore, the Commonwealth of the Northern

Mariana Islands Joint Military Training Environmental Impact Statement (CJMT-EIS), is now being implemented.

(4) Progress of the Guam Relocation Project

While the environmental impact assessment for Guam was being conducted, the Government of the United States implemented infrastructure development projects at the Andersen Air Force Base and the Apra area of the Naval Base Guam as projects unaffected by the assessment. The U.S. Government is currently implementing relocation construction work in all project areas, following the lifting of the freeze on the Guam relocation funds pursuant to the National Defense Authorization Act and the completion of the environmental impact assessment for Guam.

 Fig. III-2-4-9 (Progress of the Guam Relocation Project [image])

6 Return of Land Areas South of Kadena Air Base

The May 2006 Roadmap stated that, following the relocation to the FRF, the return of MCAS Futenma, and the transfer of III MEF personnel to Guam, the remaining facilities and areas on Okinawa will be consolidated, thereby enabling the return of significant land areas south of Kadena Air Base.

Subsequently, at the “2+2” Meeting in April 2012, it was decided to delink the progress on the relocation to the FRF from both the relocation of the III MEF personnel from Okinawa to Guam and the resulting land returns south of Kadena. In addition, with regard to the land to be returned, it was agreed to conduct consultations focusing on three categories, namely (1) land eligible for immediate return; (2) land eligible for return once the relocation of functions is completed; and (3) land eligible for return after the relocation abroad.

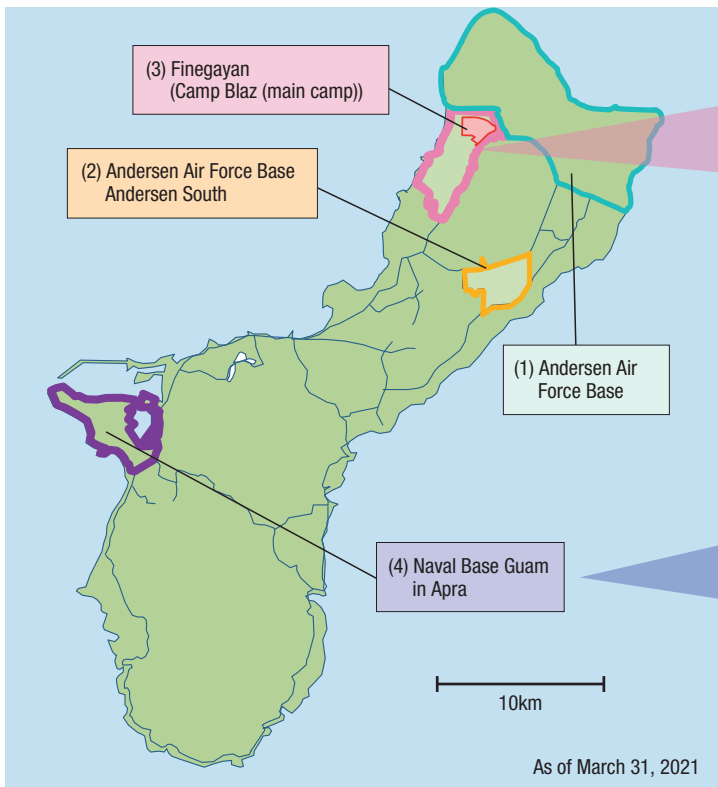
(1) Consolidation Plan for Facilities and Areas in Okinawa

Since the change of administration at the end of 2012, Japan and the United States have continued consultation under the basic policy of the Abe administration to dedicate all its strength to mitigate the impact of the U.S. Forces on Okinawa communities. Japan strongly requested an early return of land areas south of Kadena, including Makiminato Service Area (Camp Kinser) in Urasoe City of which Okinawa has particularly made a strong request for the return and coordinated with the United States. As a result, both countries announced the Consolidation Plan for Facilities and Areas in Okinawa (Consolidation Plan) in April 2013, which stipulated the

⁹ As for projects for which Japan provides financial support, cash contributions of approximately 270.2 billion yen have been provided to the U.S. side using the budgets from FY2009 to FY2020.

¹⁰ In line with this, the special provisions for the operations of the Japan Bank for International Cooperation (investment and loan) that had been prescribed by the Act on Special Measures on Smooth Implementation of the Realignment of United States Forces in Japan were abolished by an act revising part of the act that was enacted on March 31, 2017.

Fig. III-2-4-9 Progress of the Guam Relocation Project (image)



Progress of the project to establish the infrastructure in Finegayan



Progress of the project to develop the Headquarters building in the Naval Base Guam in Apra area

Relocation Project Areas	Status of Progress of GOJ Funded Projects
(1) Andersen AFB	On-base infrastructure project (*1) is in progress.
(2) Andersen South Area	Training areas (*2) project is in progress.
(3) Finegayan (Camp Blaz (main camp))	On-base infrastructure project (*1) is in progress. Building 2 Development Project for Noncommissioned Officers (*5) is in progress.
(4) Naval Base Guam in Apra	On-base infrastructure project (*1) is complete. Headquarters building (*3) project is in progress. Medical Clinic project (*4) is in progress.

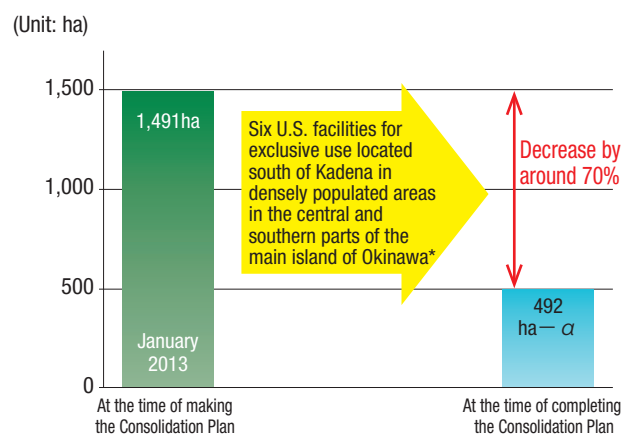
*1 On-base infrastructure project includes site preparation and development of roads, water supply and sewerage system and telecommunication system for construction of facilities such as office buildings for the Marines.
 *2 Training areas project is to develop facilities for the Marines to conduct basic training such as military operations in urban terrain and driver convoy course.
 *3 The headquarters building project is to develop a headquarters building for the Marines.
 *4 Medical clinic project is to develop a medical clinic for the Marines.
 *5 Building 2 Development Project for Noncommissioned Officers is to develop a noncommissioned officer building for Marines.

return schedule, including the specific years of return.

The return of all land according to the plan will enable the return of approximately 70% (approximately 1,048 ha, the equivalent of 220 Tokyo Domes) of six USFJ facilities for exclusive use¹¹ located in densely populated areas in the central and southern parts of the main island of Okinawa. In the Consolidation Plan, it is confirmed between Japan and the United States that this plan will be implemented as soon as possible, and that the government will continue to make the utmost efforts to return the land south of Kadena, at an early date.

See Fig. III-2-4-10 (Consolidation Plan for Facilities and Areas in Okinawa)

Fig. III-2-4-10 Consolidation Plan for Facilities and Areas in Okinawa



* Six U.S. facilities: Naha Port, Makiminato Service Area (Camp Kinser), MCAS Futenma, Camp Zukeran (Camp Foster), Camp Kuwae (Camp Lester), and Army POL Depot Kuwae Tank Farm No. 1

¹¹ Naha Port, Makiminato Service Area, MCAS Futenma, Camp Zukeran, Camp Kuwae, and Army POL Depot Kuwae Tank Farm No. 1

(2) Progress in the Return of Land

Efforts have been made to enable the early return of land areas, including the land areas that are to be returned as soon as required procedures are completed (shown in red in Fig. III-2-4-12), since the announcement of the Consolidation Plan in April 2013. At the end of March 2020, portions of land at Camp Zukeran (Warehouse Area of Facilities and Engineering Compound) (approximately 11 ha) were returned, and, as a result, the return of all “immediate return” areas in the Consolidation Plan was realized. In addition, returns were realized ahead of the schedule in the Consolidation Plan for some areas where there were strong demands for return by the local community.

All-out initiatives are being continuously made by the government to steadily implement the return of land areas south of Kadena Air Base under the Consolidation Plan and to realize the respective returns of land in the shortest possible time for more visible mitigation of the impact on Okinawa.

See Reference 26 (Estimated Timelines for the Return of Facilities and Areas South of Kadena)
 Fig. III-2-4-11 (Results of the Return of Land Areas South of Kadena Air Base)
 Fig. III-2-4-12 (Return of Land Areas South of Kadena Air Base [image])

7 Deployment of Osprey to Japan by the U.S. Forces

(1) Deployment of U.S. Marine Corps MV-22 Osprey to Okinawa

Osprey is an aircraft that combines the vertical takeoff/landing and hovering functions of rotary-wing aircraft and the flight speed and range of fixed-wing aircraft. As a primary asset of the marine air unit, the MV-22, specified for the U.S. Marine Corps, plays an important role in engaging in a broad range of activities, including transportation of personnel and supplies.

The U.S. Marine Corps replaced aged rotary-wing aircraft (CH-46) with MV-22s, which have superior basic performance. In September 2013, all the 24 CH-46s deployed at MCAS Futenma were replaced by MV-22s.

The MV-22 is a highly capable aircraft compared with the CH-46; on its flight speed, payload and flight range. Its deployment to Okinawa strengthens the deterrence of the overall USFJ and greatly contributes to the peace and stability of the region.

See Fig. III-2-4-13 (Usability of Osprey Aircraft [image])

Column

Return of Land South of Kadena Air Base

The Government of Japan is moving forward with the return of U.S. Forces facilities and areas south of Kadena based on the Consolidation Plan for Facilities and Areas in Okinawa (Consolidation Plan) released in April 2013. In March 2020, portions of land at Camp Zukeran (Warehouse Area of Facilities and Engineering Compound) (about 11 ha) were returned, meaning that the entire area designated for “immediate return” in the Consolidation Plan, was returned. Plans for the use of the returned site are also proceeding. Chatan Gusuku has been designated as a national historic site, and plans are in place for urban development in harmony with the area’s history, culture, and nature, which is expected to lead to the further development of Chatan Town and Okinawa as a whole.

In addition, following the return of a portion of land (approximately 4 ha) at Futenma Air Station in July 2017 (the local community had made strong requests for the return to use the land as city road), land near the Samashita Gate of the same air station was returned in December 2020. Ginowan City Road 11, which utilized a Ministry of Defense subsidy program, was expected to result in traffic congestion after the full opening of the road due to its narrow width and steep angle near the Samashita Gate. Ginowan City requested for this area

to be returned to change the shape of the road to across a portion of Futenma Air Station. Following the return, Ginowan City Road 11 was constructed and was fully opened to traffic in March 2021. This is expected to reduce the traffic congestion.

The relocation of U.S. Forces military facilities to Kadena Ammunitions Storage Area (Chibana Area), Torii Communication Station, Camp Hansen, and Camp Zukeran is currently underway to further promote the return of facilities south of Kadena Air Base. The MOD will continue to work to mitigate impacts on Okinawa by achieving tangible and steady outcomes.



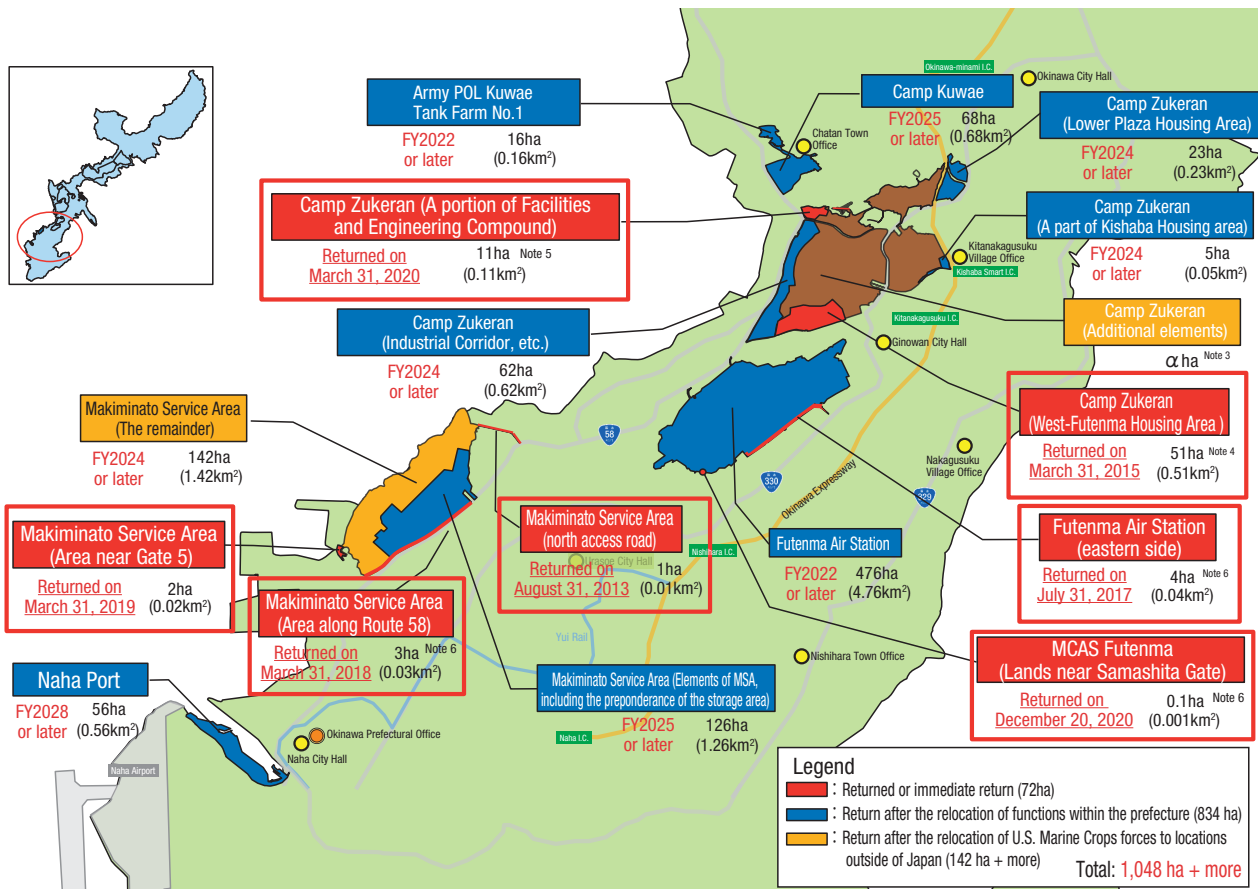
Opening ceremony for Ginowan City Road 11 (March 2021)

Fig. III-2-4-11 Results of the Return of Land Areas South of Kadena Air Base

	Name	Returned	Transferred	Area
Areas eligible for immediate return in the comprehensive plan	Makiminato Service Area (entrance road on the north side)	August 2013	August 2013	Approx. 1ha
	Camp Zukeran (Nishi Futenma residential area)	March 2015	March 2018	Approx. 51ha
	Makiminato Service Area (area near Gate 5)	March 2019	(*)	Approx. 2ha
	Camp Zukeran (a portion of the facility engineering department district)	March 2020	(*)	Approx. 11ha
Areas eligible for return after relocation of functions within Okinawa in the comprehensive plan but returned in advance as a result of a separate Japan-U.S. agreement.	MCAS Futenma (Lands along the east side)	July 2017	March 2019	Approx. 4ha
	Makiminato Service Area (Lands along national route 58)	March 2018	September 2019	Approx. 3ha
	MCAS Futenma (Lands near Samashita Gate)	December 2020	December 2020	Approx. 0.1ha

Note: The asterisk (*) on the graph refers to future transfers scheduled.

Fig. III-2-4-12 Return of Land Areas South of Kadena Air Base (image)



- Notes: 1. The timing and year are based on the best case scenario. The timing may be postponed depending on the progress of the efforts, including relocation to outside of Japan.
 2. Land area of each area is an approximate figure and may be slightly modified based on the results of future surveys, etc. Numbers may not add up due to rounding.
 3. Studies will be made in the process of developing a master plan to determine the feasibility of additional land returns.
 4. The area to be returned at Camp Zukeran (West-Futenma Housing area) was listed as 52 ha in the Consolidation Plan, but it was revised to 51 ha according to actual measurements.
 5. The area to be returned at Camp Zukeran (a portion of the warehouse area of the Facilities and Engineering Compound, etc.) was listed as 10 ha in the Consolidation Plan, but it was revised to 11 ha based on the area to be returned in the JC agreement of September 2013.
 6. MCAS Futenma (lands along the east side and near Samashita Gate) and Makiminato Service Area (lands along national route 58) were returned ahead of schedule as a result of a separate Japan-U.S. agreement.
 7. JC: Japan-U.S. Joint Committee

(2) Deployment of CV-22 Osprey by the U.S. Air Force to Yokota Air Base

In May 2015, the United States announced that CV-22, specified for the U.S. Air Force, would be deployed to Yokota Air Base (which encompasses Fussa City, Tachikawa City, Akishima City, Musashi Murayama City, Hamura City and Mizuho Town of Tokyo Prefecture). A

total of 10 CV-22 Ospreys are scheduled to be deployed in stages by around 2024, with the first five CV-22s deployed to Yokota Air Base in October 2018.

The CV-22 deployed to Yokota Air Base plays a role in transporting personnel and supplies of the special operation units of the U.S. Forces to address crises and emergencies in the Asia-Pacific region, including

humanitarian assistance and natural disasters.

As Japan faces an increasingly severe security environment, the deployment of high-performance CV-22 enhances the deterrence and response capabilities of the Japan-U.S. Alliance and contributes to the defense of Japan and the stability of the region from the perspective of the commitment by the U.S. to the Asia-Pacific region and the building-up of readiness by the United States.


(3) Safety of Osprey

Prior to the deployment of MV-22s to MCAS Futenma in 2012, Japan established an analysis and assessment team composed of aircraft pilots and experts from inside and outside the government and confirmed the safety of MV-22 by conducting its own survey, etc. In addition, when Japan made the decision to introduce Ospreys in 2014, the government reconfirmed their safety by collecting and analyzing all kinds of technical information, not only in the preparation phase, but also after the decision of introduction.

The MOD has dispatched the GSDF Osprey personnel to the U.S. Marine Corps' training programs since the fall of 2016. The personnel who piloted and maintained the aircraft are of the opinion that the Osprey is a reliable aircraft that allows for stable maneuvering and maintenance.

Additionally, the CV-22 has the same propulsion system as the MV-22 and both aircraft also have a basic structure in common; therefore the safety of both aircraft is at the same level.

Japan considers that ensuring safety is of prime importance in operations of the U.S. Forces, and on various occasions, the Minister of Defense requested the Secretary of Defense and other high-ranking officials to give consideration to local communities and ensure safety. The Government of Japan will continue to ask for the maximum consideration for safety.

 Reference 27 (Chronology of Osprey Deployment by the U.S. Forces)

(4) Usability of Osprey Deployed by the U.S. Forces in Case of Disaster

In the aftermath of the devastating typhoon that hit the central part of the Philippines in November 2013, 14 MV-22 aircraft, deployed in Okinawa, were dispatched for humanitarian assistance and disaster relief activities to support Operation Damayan. The MV-22s were deployed promptly to affected areas that were difficult to access, and transported several hundred isolated victims and about six tons of relief materials in a day. In April 2014, the MV-22, deployed in Okinawa, was dispatched for search and rescue activities in the wake of an accidental sinking of a passenger ship off the coast of Jindo in the

ROK. Furthermore, in response to the large earthquake that hit Nepal in April 2015, four MV-22s deployed in Okinawa were dispatched to the country to transport personnel and supplies.

In Japan as well, when the Kumamoto Earthquake occurred in 2016, MV-22s were dispatched to deliver daily necessities to the disaster-stricken areas.

In this manner, the MV-22 is capable of conducting humanitarian assistance and disaster relief activities immediately and over a large range when large-scale disasters occur because of its high performance and multifunctionality. It has also been used for disaster prevention drills since 2014. In September 2016, two MV-22s participated in the comprehensive disaster prevention drills of Sasebo City, Nagasaki Prefecture and conducted delivery drills for isolated islands. Like the MV-22, the CV-22 can conduct humanitarian assistance and disaster relief activities, including search and rescue missions, both immediately and over a large range, in the case of a large-scale disaster.

As such, it is expected that the superior capabilities of the Osprey deployed by the U.S. Forces can be showcased in a variety of operations in the future as well.

 Fig. III-2-4-13 (Usability of Osprey Aircraft [image])

8 Consultation Structures for Mitigating the Impact of Bases on Okinawa

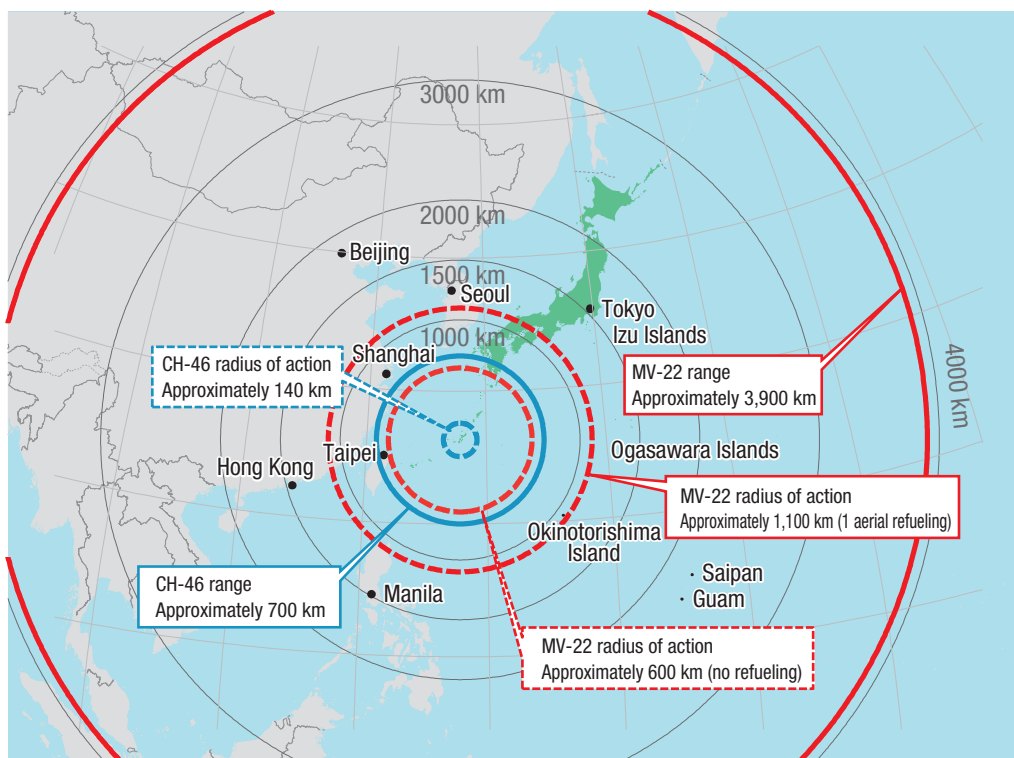
In order to mitigate the concentrated impact on Okinawa, the Government of Japan has been committed to further mitigating the impact, listening to, for example, the opinions of the local residents through various consultative bodies.

 Fig. III-2-4-14 (Consultative Bodies on the Mitigation of Impact of Bases on Okinawa)

9 Initiatives for the Use of Lands Previously Provided for Use by the Stationed Forces

The Act on Special Measures Concerning Promotion of Effective and Appropriate Use of the Lands in Okinawa Prefecture Previously Provided for Use by the Stationed Forces stipulates various measures concerning lands in Okinawa provided for use by the USFJ ("USFJ Land") agreed to be returned. The MOD mainly conducts the following initiatives, and will continue its initiatives to promote the effective and appropriate use of returned lands by coordinating and cooperating with related ministries, the prefectural government and local municipalities. The MOD: (1) conducts mediation in relation to access for surveys, etc., to be implemented by the prefectural government and local municipalities on the USFJ Land which are agreed to be returned;

Fig. III-2-4-13 Usability of Osprey Aircraft (image)



■ Comparison of Basic Performance		MV-22	CH-46
Maximum speed	Approximately 520 km/h	Approximately 270 km/h	Approximately 270 km/h
Cruising speed	Approximately 490 km/h	Approximately 220 km/h	Approximately 220 km/h
Range	Approximately 3,900 km	Approximately 700 km	Approximately 700 km
Radius of action	Approximately 600 km (With 24 troops on board)	Approximately 140 km (With 12 troops on board)	Approximately 140 km (With 12 troops on board)
Number of troops carried	24	12	12
Number of crew	3-4	3-5	3-5
Cargo (inside)	Approximately 9,100 kg	Approximately 2,300 kg	Approximately 2,300 kg
Cargo (outside)	Approximately 5,700 kg	Approximately 2,300 kg	Approximately 2,300 kg
Rotor diameter	Approximately 11.6 m	Approximately 15.5 m	Approximately 15.5 m
Angle of flight	Approximately 7,500 m	Approximately 3,000 m	Approximately 3,000 m
Own weight	Approximately 16,000 kg	Approximately 7,700 kg	Approximately 7,700 kg
Measurement	<p>MV-22 and CH-46 are not much different in size.</p>		

Fig. III-2-4-14 Consultative Bodies on the Mitigation of Impact of Bases on Okinawa

Name (year)	Member	Purpose
Okinawa Policy Council (1996)	Entire cabinet excluding Prime Minister and Governor of Okinawa	Consultation concerning issues pertaining to USFJ facilities and areas in Okinawa and basic policies relating to Okinawa
Subcommittee of the Okinawa Policy Council (2013)	Chief Cabinet Secretary, Minister of State for Okinawa, Minister of Foreign Affairs, Minister of Defense, and Governor of Okinawa	Responses to various issues relating to the mitigation of the impact of bases on Okinawa and measures to revitalize the economy of Okinawa Prefecture
Council for Promoting the Mitigation of the Impact of MCAS Futenma on Okinawa (2014)	Chief Cabinet Secretary, Minister of State for Okinawa, Minister of Foreign Affairs, Minister of Defense, Governor of Okinawa, and Mayor of Ginowan	Consultation concerning the mitigation of the impact of MCAS Futenma
Committee for Promoting the Mitigation of the Impact of Bases on Okinawa (2014)	State Minister of Defense, Parliamentary Vice-Minister of Defense, Administrative Vice-Minister of Defense, Vice-Minister of Defense for International Affairs, Director General of Minister's Secretariat, Director General of Bureau of Defense Policy, Director General of Bureau of Defense Buildup Planning, Director General of Bureau of Local Cooperation, Chief of Staff of Joint Staff, Chief of Staff of GSDF, Chief of Staff of MSDF, and Chief of Staff of ASDF	Deliberation on basic policies regarding the early return of USFJ facilities and areas, and regarding the mitigation of the impact on Okinawa with the aim of smooth and effective implementation of measures based on those policies
Consultation between the Central Government and Okinawa Prefecture (2016)	Chief Cabinet Secretary, Minister of State for Okinawa, Minister of Foreign Affairs, Minister of Defense, Deputy Chief Cabinet Secretary, Governor of Okinawa, and Deputy Governor of Okinawa	Consultation concerning the mitigation of the impact of bases on Okinawa and measures to revitalize the economy of Okinawa Prefecture

- (2) conducts measures applying to all the returned lands to remove obstacles for use such as soil contamination and unexploded ordnance, not only those caused by the activities of the stationed forces, before handing over the land to the owners; and
- (3) provides financial benefits to alleviate the impact on the owners of the returned lands and to promote use of the land.



4 Stationing of the U.S. Forces in Regions Other than Okinawa

In regions other than Okinawa, the MOD is implementing measures to secure the stable stationing of the U.S. Forces by maintaining its deterrence and trying to mitigate the impact on local communities.

1 Realignment of USFJ Facilities and Areas in Kanagawa Prefecture

With regard to the realignment of USFJ facilities and areas in Kanagawa Prefecture, etc., the return of facilities and areas including the Kamiseya Communication Station and the Fukaya Communication Site has already been realized based on the Japan-U.S. Joint Committee agreement of October 2004.

However, more than 10 years have passed since the initial agreement, and Japan's security environment has become increasingly severe. Therefore, there have been changes in the U.S. Navy's posture and capabilities, as represented by the increased operation of U.S. vessels at Commander Fleet Activities, Yokosuka. In light of such circumstances, the following were agreed at the Japan-U.S. Joint Committee meeting in November 2018: (1) development of facilities for satisfying the U.S. Navy's facility requirements; (2) start of negotiation on joint use of the Negishi Dependent Housing Area to conduct site restoration works; and (3) cancellation of the plan to construct family housing in the Yokohama City area of the Ikego Housing Area and Navy Annex. Subsequently, joint use of the Negishi Dependent Housing Area was agreed upon at the Japan-U.S. Joint Committee meeting in November 2019.

 Fig. III-2-4-15 (Locations of Major U.S. Forces Stationing in Japan [Excluding Okinawa Prefecture] [As of March 31, 2020])
 Fig. III-2-4-16 (Realignment of USFJ Facilities and Areas in Kanagawa Prefecture [image])

2 Current Situation regarding the Realignment of the USFJ as Stipulated in the Roadmap

(1) Improvement of U.S. Army Japan Command and Control Capability

The headquarters of U.S. Army Japan (USARJ) at Camp Zama (Sagamihara City and Zama City in Kanagawa Prefecture) was reorganized into the headquarters of the USARJ & I Corps (Forward) in December 2007. The subsequent reorganization project to improve the capabilities of the U.S. Army Headquarters in Japan is shown in Figure III-2-4-16.

The Ground Component Command HQ has set up the Japan-U.S. Joint Headquarters at Camp Zama to ensure close communication and coordination with the USARJ as well as swift response to various events.

 Fig. III-2-4-17 (Initiatives for Improvement of U.S. Army Japan Command and Control Capability and Mitigation of Impact)

(2) Yokota Air Base and Airspace

a. Commencement of the Operation of the Bilateral Joint Operations Coordination Center (BJOCC) and the Relocation of ASDF Air Defense Command Headquarters (HQ)

Enhancement of coordination between the headquarters of both countries, combined with the transition to joint operational posture, is highly important to ensure a response with flexibility and readiness of the SDF and the U.S. Forces. Therefore, at the end of FY2011, the BJOCC commenced its operations at Yokota Air Base and the Air Defense Command HQ¹² and its relevant units were relocated to Yokota Air Base. These arrangements have made it possible to enhance coordination between the headquarters of the SDF and the U.S. Forces, including the sharing of information concerning air defense and BMD.

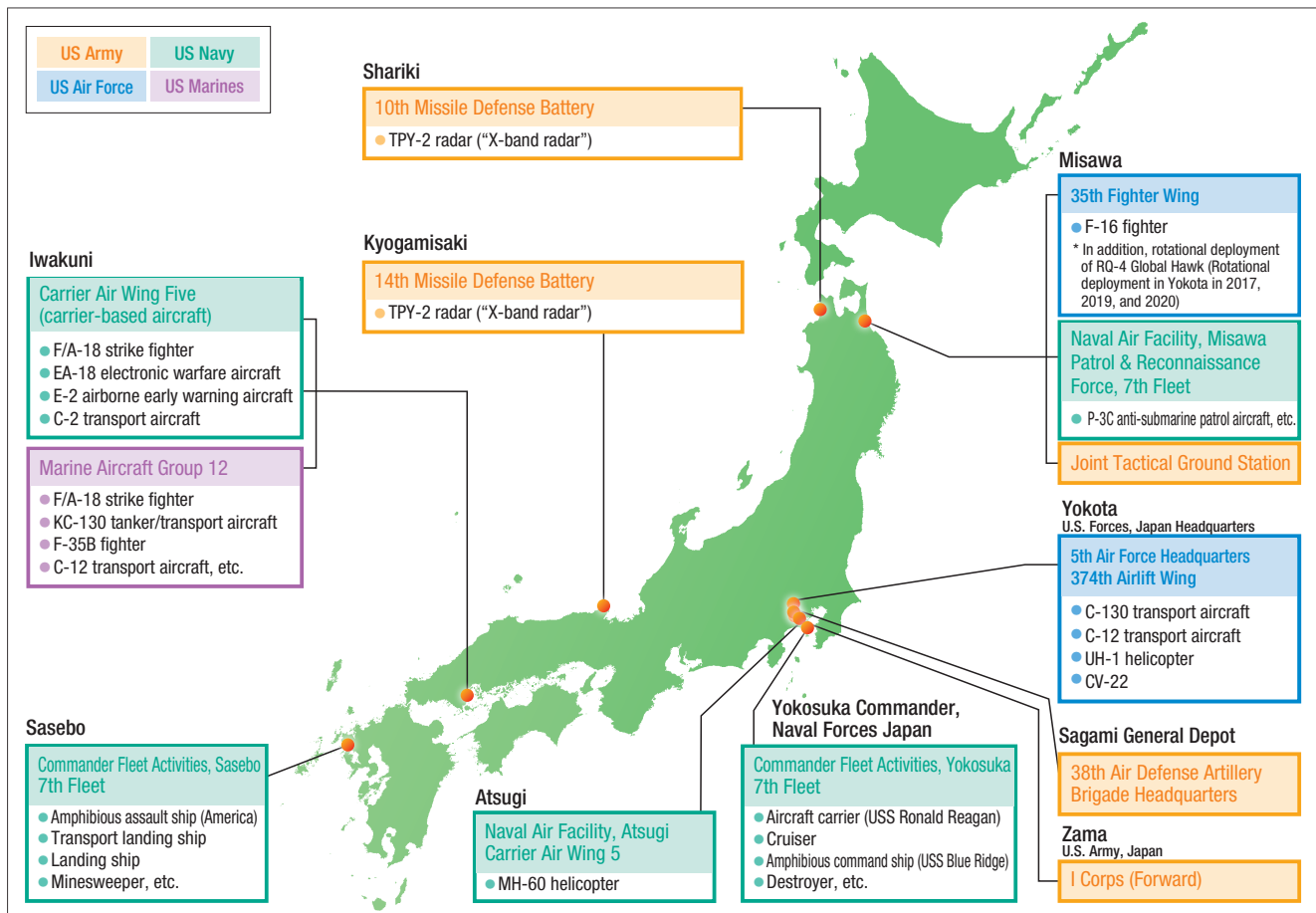
b. Yokota Airspace

To facilitate the operations of civilian aircraft in Yokota airspace, where the U.S. Forces conduct radar approach control, measures have been taken since 2006 to temporarily transfer the responsibility for air traffic

¹² The BJOCC functions to contribute to providing a joint response for Japan's defense. To that end, it works to enhance information sharing, close coordination, and interoperability between the Japanese and U.S. headquarters.

Fig. III-2-4-15

Locations of Major U.S. Forces Stationing in Japan (Excluding Okinawa Prefecture) (As of March 31, 2020)



Note: Based on information on the U.S. Forces Japan website and other sources.

control of portions of Yokota airspace to Japanese authorities, to deploy ASDF officers at the Yokota Radar Approach Control (Yokota RAPCON), and to reduce the airspace by about 40% (i.e., the release of air traffic control from USFJ).

c. Civilian-Military Dual Use of Yokota Air Base

At the Japan-U.S. summit meeting held in May 2003, it was agreed that the joint civilian-military use of Yokota Air Base would be studied, and a Liaison Conference was then established as a working panel attended by relevant government ministries and agencies and the Tokyo Metropolitan Government. The governments of Japan and the United States are also conducting a study on the specific conditions and modalities, with the understanding that both countries will not compromise the military operations and safety of Yokota Air Base.

(3) Deployment of U.S. Aircraft Carrier to Commander Fleet Activities, Yokosuka

The presence of the U.S. Pacific Fleet plays an important role in ensuring maritime security in the Indo-Pacific region as well as regional peace and stability. The U.S.

aircraft carrier provides the core capability of the Fleet.

The U.S. Navy affirms that it will continue to ensure that all of its forward-deployed nuclear-powered vessels, including USS "Ronald Reagan,"¹³ which anchored at Commander Fleet Activities, Yokosuka (Yokosuka City, Kanagawa Prefecture), adhere to the relevant safety policies. For example, the nuclear reactor will normally be shut down while the aircraft carrier is anchored, and repairing and refueling will not be carried out in Japan. The Government of Japan will continue taking all possible measures to ensure safety.

(4) Measures Relating to Naval Air Facility Atsugi and MCAS Iwakuni

a. Relocation of Carrier-Based Aircraft

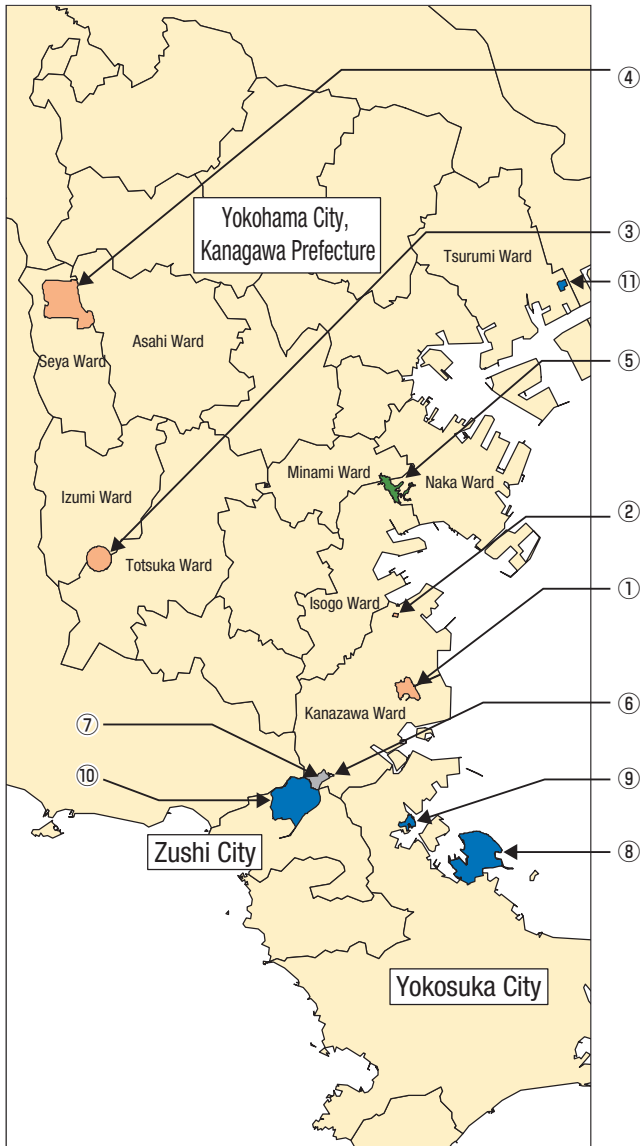
Since Naval Air Facility Atsugi (Ayase City and Yamato City in Kanagawa Prefecture) is located in an urban district, the noise of carrier jets taking off and landing in particular had been a problem for a long time.

Thus, after the completion of the runway relocation project¹⁴ at MCAS Iwakuni (Iwakuni City, Yamaguchi Prefecture), which made aircraft operations possible with

¹³ Nuclear-powered aircraft carriers do not need to replenish their fuel and they are able to maintain the high speeds necessary for the operation of aircraft, giving them excellent combat and operational capabilities.

¹⁴ A project to relocate the runway of MCAS Iwakuni by approximately 1,000 m to the east (offshore), in response to the requests from Iwakuni City, etc.

Fig. III-2-4-16 Realignment of USFJ Facilities and Areas in Kanagawa Prefecture (image)



Japan-U.S. Joint Committee agreement of October 2004

Number	Name	Location	Area (ha)	Plan for land return, etc.
①	Koshiba POL Depot	Kanazawa Ward, Yokohama City	Approx. 53 ha	Returned in December, 2005
②	Tomioka Storage Area	Kanazawa Ward, Yokohama City	Approx. 3 ha	Returned in May, 2009
③	Fukaya Communication Site	Izumi Ward, Yokohama City	Approx. 77 ha	Returned in June, 2014
④	Kamiseya Communication Station	Seya Ward and Asahi Ward, Yokohama City	Approx. 242 ha	Returned in June, 2015
⑤	Negishi Dependent Housing Area	Naka Ward, Minami Ward and Isogo Ward, Yokohama City	Approx. 43 ha	To be returned when the construction of family housing etc. is completed at Ikego Housing Area and Navy Annex
⑥	Detached part of Ikego Housing Area and Navy Annex	Kanazawa Ward, Yokohama City	Approx. 1 ha	Return procedures to begin upon completion of the current use
⑦	Ikego Housing Area and Navy Annex	Yokohama City Area	—	Construction of family housing, etc.

Returned

Japan-U.S. Joint Committee agreement of November 2018

[Development of facilities]

Number	Name	Location	Details
⑧	Commander Fleet Activities, Yokosuka	Yokosuka City	Bachelor enlisted quarters
⑨	Urako Storage Area	Yokosuka City	A wharf
⑩	Ikego Housing Area and Navy Annex	Zushi City Area	Living support facilities, fitness center, maintenance shop and fire station
⑪	Tsurumi POL Depot	Tsurumi Ward, Yokohama City	A fire station

[Joint use and return]

Number	Name	Location	Area	Details
⑤	Negishi Dependent Housing Area	Naka Ward, Minami Ward and Isogo Ward, Yokohama City	Approx. 43 ha	A Japan-US consultation concerning joint use of the Negishi Dependent Housing Area will commence with the aim of promptly carrying out site restoration work. Consultation on the specific return date will be held between the two governments depending on the progress of the site restoration work.

[Cancellation of construction]

Number	Name	Location	Details
⑦	Ikego Housing Area and Navy Annex	Yokohama City Area	Cancellation of construction of family housing, etc.

Fig. III-2-4-17 Initiatives for Improvement of U.S. Army Japan Command and Control Capability and Mitigation of Impact

Time	Improvement
December 2007	Reorganized into the headquarters of the USARJ&I Corps (Forward) at Camp Zama
June 2008	Agreed on the partial return of land (approximately 17 ha) at Sagami General Depot
September 2008	Reorganization of the headquarters of the USARJ&I Corps (Forward)
August 2011	The operation of the Mission Command Training Center commenced
October 2011	Agreed on the partial return of land (approximately 5.4 ha) at Camp Zama
June 2012	Agreed on the shared use of a portion of land at Sagami General Depot (approximately 35 ha) with Sagami City
March 2013	The GSDF Central Readiness Force Headquarters was relocated from GSDF Asaka Camp to Camp Zama
September 2014	Partial return of land (approximately 17 ha) at Sagami General Depot
December 2015	The shared use of a portion of land at Sagami General Depot (approximately 35 ha) commenced
February 2016	Partial return of land (approximately 5.4 ha) at Camp Zama


Fig. III-2-4-18

Overview of and Measures Related to Naval Air Facility Atsugi and MCAS Iwakuni

Measure	Overview
Relocation of Carrier Air Wing Five (CVW-5) squadrons from Naval Air Facility Atsugi to MCAS Iwakuni	<ul style="list-style-type: none"> ○ After explanation in January 2017 to Yamaguchi Prefecture, Iwakuni City, and other municipalities that the relocation of carrier-based aircraft to MCAS Iwakuni would commence in the latter half of 2017, etc., Yamaguchi Prefecture, Iwakuni City, and other municipalities expressed their approval by June 2017. ○ Started relocation in August 2017. ○ Completed relocation in March 2018.
Relocation of MSDF EP-3, etc., from MCAS Iwakuni to Naval Air Facility Atsugi	Following bilateral consultations upon request from the local community and from the perspective of the defense system, Japan and the United States confirmed in 2013 that EP-3 aircraft will remain at MCAS Iwakuni.
Relocation of the KC-130 air refueling aircraft from MCAS Futenma to MCAS Iwakuni	Relocation completed in August 2014.
Rotational deployment of the KC-130 to Kanoya Air Base and Guam	<ul style="list-style-type: none"> ○ Rotational deployment of the KC-130 to MSDF Kanoya Air Base (Kanoya City, Kagoshima Prefecture) started in September 2019. ○ Regarding rotational deployment to Guam, training commencement confirmed.
Relocation of CH-53D helicopters from MCAS Iwakuni to Guam	Japan and the United States confirmed that CH-53D helicopters, which had been sent to the Middle East, will return to the U.S. mainland without returning to MCAS Iwakuni, and will then be relocated to Guam.

less impact on the living environment of the surrounding communities, it was decided that CVW-5 squadrons would be relocated from Naval Air Facility Atsugi to MCAS Iwakuni. The relocation began in August 2017 and completed in March 2018. As a result, the noise in areas around Naval Air Facility Atsugi was alleviated to a significant extent, while maintaining the forward deployment of a U.S. aircraft carrier and carrier-based aircraft.

In order to mitigate impacts of the increased operations at MCAS Iwakuni due to the relocation, the related measures listed in Fig. III-2-4-18 have been implemented. If all of these measures are fully implemented, the noise problems are expected to be mitigated from the current situation, with the area requiring residential noise-abatement work, or the so-called first category area, decreasing from approximately 1,600 ha to approximately 650 ha.

 See Fig. III-2-4-18 (Overview of and Measures Related to Naval Air Facility Atsugi and MCAS Iwakuni)

b. Field-Carrier Landing Practice (FCLP)

The May 2006 Roadmap prescribes that a bilateral framework to conduct a study on a permanent FCLP facility is to be established with the goal of selecting a permanent site at the earliest possible date. Since December 2019, the MOD has acquired approximately 90% of the land on Mageshima in Nishinoomote City, Kagoshima Prefecture, has been conducting various surveys in preparation for the development of SDF facilities, and has been taking measures such as holding briefing sessions for residents on the progress of the surveys, starting the procedures for the environmental impact assessment in February 2021, and implementing a demonstration flight by the ASDF fighter aircraft in May of the same year. This SDF facility will be used to support operations in response to a variety of situations, including large-scale disasters, as well as regular exercises and other activities, including use by the U.S. Forces as a permanent FCLP facility.

In addition, the 2005 SCC document confirmed that

the U.S. Forces will continue to conduct FCLP at Iwo-To in accordance with existing temporary arrangements until a permanent training facility is identified.


c. Resumption of Civil Aviation Operations at MCAS Iwakuni

Considering that the local public entities, etc., including Yamaguchi Prefecture and Iwakuni City, had been working together to request the resumption of civil aviation operations, it was agreed in the Roadmap that “portions of the future civilian air facility will be accommodated at MCAS Iwakuni.” Based on this agreement, Iwakuni Kintaikyo Airport was opened in December 2012, resuming regular flights of civil aviation aircraft for the first time in 48 years.

(5) Ballistic Missile Defense (BMD)

In June 2006, an AN/TPY-2 radar (so-called “X-Band Radar”) system was deployed to the U.S. Shariki Communication Site (Tsugaru City in Aomori Prefecture).¹⁵ Also in October 2006, U.S. Army Patriot PAC-3 units (Patriot Advanced Capability) were deployed to Kadena Air Base (Kadena Town, Okinawa City and Chatan Town in Okinawa Prefecture) and Kadena Ammunition Storage Area (Yomitan Village, Okinawa City, Kadena Town, Onna Village and Uruma City in Okinawa Prefecture). In December 2014, the second AN/TPY-2 radar in Japan was deployed to the U.S. Kyogamisaki Communication Site (Kyotango City in Kyoto Prefecture).

The United States deployed Aegis destroyers with BMD capabilities to Commander Fleet Activities, Yokosuka in October 2015, March 2016 and May 2018.

 Chapter 1, Section 2-2-1 (Japan’s Comprehensive Air and Missile Defense Capability), p. 265

(6) Training Relocation

a. Aviation Training Relocation (ATR)

Based on the decision that U.S. aircraft from three USFJ facilities and areas—Kadena, Misawa (Misawa City

¹⁵ The radar was deployed to ASDF Shariki Sub Base (in Aomori Prefecture) in June 2006, but was thereafter transferred to the neighboring U.S. Shariki Communication Site.

and Tohoku Town in Aomori Prefecture) and MCAS Iwakuni—would participate for the time being in bilateral training at SDF facilities, the Aviation Training Relocation (ATR)¹⁶ has been underway since 2007. The MOD has been improving its infrastructure, as required, for the training relocation.

 **See** Fig. III-2-4-19 (Overview of the Background to the Aviation Training Relocation)

The ATR contributes to enhancing interoperability between the two countries, and also to relocating part of air-to-ground training conducted by using Kadena Air Base. Thus, this training relocation will help noise abatement around Kadena Air Base, thereby contributing to the mitigation of the impact on Okinawa.

In addition to assisting the USFJ, the MOD/SDF is making efforts to ensure the safety and security of the local community, such as the establishment of a liaison office, facilitating communication with related government agencies, and response to requirements from the local community. These efforts have been contributing to successful training relocation.

b. Training Relocation for MV-22

The Government of Japan and the United States Government decided in the “2+2” joint statement of October 2013, to utilize the opportunities to participate in various operations in mainland Japan and across the region to reduce the amount of time that MV-22s are deployed and used for the training in Okinawa so that training outside of Okinawa Prefecture, including mainland Japan, can be increased while maintaining the deterrence of the Alliance. Based on above, both governments have been moving forward with the training of the MV-22 deployed at MCAS Futenma outside of Okinawa Prefecture, etc.

Fig. III-2-4-19

Overview of the Background to the Aviation Training Relocation

Time of reaching agreements	Overview
May 2006	In the “Japan-U.S. Roadmap for Realignment Implementation,” it is conformed that U.S. aircraft from three USFJ facilities and areas—Kadena, Misawa and MCAS Iwakuni—would participate in bilateral training with the SDF at SDF facilities in Chitose, Misawa, Hyakuri, Komatsu, Tsuiki, and Nyutabaru.
January and October 2011	At the Joint Committee, both governments agreed to include Guam as a new training relocation site and to expand the scale of training.
March 2014	At the Joint Committee, both governments agreed to add air-to-ground training using the Misawa Air-to-Ground Range (Misawa City and Rokkasho Village in Aomori Prefecture).

In September 2016, it was agreed at the Joint Committee to relocate the training activities of Tilt-Rotor/Rotary Wing aircraft, such as AH-1, CH53, and the MV-22 that are currently deployed at MCAS Futenma out of Okinawa Prefecture at Japan’s expense in order to further promote training outside of Okinawa to mitigate the impact of training activities there.

Two bilateral training were conducted in FY2020 (in Kagoshima prefecture from October to November 2020, and in Gunma and Niigata prefectures in December 2020). From the date of the agreement up to March 2021, a total of 12 training, in addition to the ones mentioned above, have been conducted in Guam and in Japan at the exercise sites in Hokkaido, Miyagi, Shiga, Kagawa, Kumamoto, Oita, and Miyazaki prefectures.

The MV-22’s amount of time deployed and training in Okinawa will continue to be reduced by relocating exercises held in mainland of Japan and Guam, and the government will continue to promote initiatives that contribute to further mitigating the impact on Okinawa.


5 Initiatives for Smooth Implementation of the Realignment of the USFJ

In order to smoothly implement the realignment of the USFJ based on the May 2006 Roadmap, the Act on Special Measures on Smooth Implementation of the Realignment of United States Forces in Japan (USFJ Realignment Special Measures Act) was enacted in August 2007. Realignment grants, Special Subsidy Rates for Public Projects, etc., and other systems were established based on the law.

In addition, under the U.S. Forces realignment, some USFJ facilities and areas will be returned, and the U.S. Marine Corps in Okinawa will be relocated to Guam. Since these developments may affect the employment

of USFJ employees, the Government of Japan will take measures to include education and skills training, which is to help retain their employment.

The Realignment Special Measures Act was supposed to cease to be effective as of March 31, 2017. However, since there remain realignment projects that require implementation, on March 31, 2017, an act revising part of the Act including a 10-year extension of the time limit of the Act to March 31, 2027 was enacted.

 **See** Reference 28 (Outline of the Act on Special Measures on Smooth Implementation of the Realignment of United States Forces in Japan)

¹⁶ USFJ aircraft conduct bilateral and other training at SDF facilities, etc.

In situations where the need and potential for international cooperation in the security and defense areas are increasing unprecedentedly, the Ministry of Defense (MOD)/Self-Defense Forces (SDF) is required to actively contribute to ensuring the security of Japan, the peace and stability of the region, and the peace, stability, and prosperity of the entire international community from the perspective of “Proactive Contribution to Peace” based on the principle of international cooperation.

In line with the vision of a “Free and Open Indo-Pacific” (FOIP)¹ and in accordance with the National Defense Program Guidelines (NDPG), Japan will strategically promote bilateral and multilateral defense cooperation and exchanges as part of multi-faceted and multi-layered security cooperation, while paying attention to regional

characteristics and partner countries’ situations.

Japan will also actively advance its efforts to solve global security issues, including securing the freedom and safety of navigation and overflight, coordination and cooperation with relevant countries in relation to the use of the space and cyber domains, international peace cooperation activities, arms control and disarmament, and non-proliferation of weapons of mass destruction.

These efforts will be promoted mainly under the framework of the Japan-U.S. Alliance and in close coordination with countries that share the same universal values and security interests as Japan. The MOD/SDF further intends to create a desirable security environment for Japan by engaging in routine activities.

Section 1

Strategic Promotion of Multi-Faceted and Multi-Layered Defense Cooperation

1 Significance and Evolution of Security Cooperation and Dialogue, and Defense Cooperation and Exchanges, etc.

1 Significance and Evolution of Security Cooperation and Dialogue, and Defense Cooperation and Exchanges

(1) Significance of Security Cooperation and Dialogue, and Defense Cooperation and Exchanges

The peace and stability of the Indo-Pacific region is closely related to Japan’s security. In addition, with increasingly changeable and complicated global power dynamics, and escalation of political, economic, and military inter-state competition, they are also becoming a more important issue for the international community.

While nations with largescale military power concentrate in the region, no framework for regional security cooperation has been sufficiently institutionalized. As political, economic and social systems in each nation widely differ in the region, visions of security vary from country to country. Furthermore, there has been an increasing number of unilateral actions

attempting to change the status quo by coercion without paying respect to existing international law.

The issues involving the South China Sea, in particular, cause concerns over the maintenance of the rule of law at sea, freedom of navigation and overflight, and the stability of the Southeast Asian region. Thus, responses to these issues have become an important challenge to ensure the regional stability.

Taking into account the international situation, regional characteristics, and situations and security issues that other nations face, the MOD/SDF intends to strategically promote multi-faceted and multi-layered security cooperation, so that each country can build mutual trust and work together to solve regional security issues.

(2) Forms and History of Security Cooperation and Dialogue, and Defense Cooperation and Exchanges

Defense cooperation and exchanges have been delivered in the forms of high-level dialogues and exchanges,


¹ In his keynote speech at the Fourth Tokyo International Conference on African Development (TICAD IV) held in Kenya in August 2016, Prime Minister Abe referred to the concept of FOIP. In the Japan-U.S. summit meeting in November 2017, the United States expressed its support for the above vision presented by Japan. The leaders of the two countries urged all nations to respect the freedom of navigation and flight, and the rule of law, and agreed to build multi-layered relationships with countries that support this approach.

bilateral/multilateral exercises, capacity building, and defense equipment and technology cooperation.

The MOD/SDF has long strived to alleviate any conditions of confrontation and tension, and to foster a collaborative and cooperative relationship by building face-to-face relationships through bilateral dialogues and exchanges. In addition, the MOD/SDF has recently enhanced bilateral defense relationships from traditional exchanges to deeper cooperation in a phased manner by appropriately combining various means, including bilateral/multilateral training and exercises, capacity building, defense equipment and technology cooperation, and the development of institutional frameworks such as the Acquisition and Cross-Servicing Agreements (ACSA).

In addition, multilateral regional security cooperation and dialogue are in the process of evolving from those that focus on dialogue to those that focus on cooperation that seeks to build regional order. It is important to promote bilateral and multilateral defense cooperation and exchanges in a multilayered, practical manner in order to create an ideal security environment.

Due to the spread of the COVID-19, the MOD has held more telephone conversations and video teleconferences than before. The MOD deepens communication with foreign countries and continues to strategically promote defense cooperation and exchanges even from the government office in Ichigaya, Tokyo.

 **See** Reference 29 (Situations Concerning the Conclusion of Agreements)
Reference 30 (Exchange Student Acceptance Record [Number of Newly Accepted Students in FY2020])
Fig. III-3-1-1 (Defense Cooperation and Exchanges)
Fig. III-3-1-2 (Number of High-level Bilateral Dialogues and Consultations [April 2020–March 2021])

2 Efforts under the Vision of a “Free and Open Indo-Pacific” (FOIP)

(1) Characteristics of the Indo-Pacific Region

Free and open maritime order, which relies on the rule of law, is the foundation for the stability and prosperity of the international community. The Indo-Pacific region is at the core of the world vitality, and home to half the world's population. It is important to establish this region as a free and open global commons to ensure the peace and prosperity of the entire region.

On the other hand, a range of challenges exist for upholding and reinforcing FOIP in the region, including in Japan's vicinity, such as a rapid modernization of military forces and intensified military activities.

(2) Direction of the MOD's Initiatives

Given this situation, the MOD/SDF is, for example,

promoting defense cooperation and exchanges to ensure that Japan can secure the stable use of major sea lanes. In addition, the MOD/SDF is promoting mutual understanding and confidence building with countries that modernize their military forces and intensify their military activities to prevent contingencies and ensure Japan's security. Furthermore, for countries in the region that are taking steps to respond to changes in the environment, the MOD/SDF is trying to contribute to regional peace and stability by supporting their efforts through defense cooperation and exchanges.

(3) Areas with Which Japan Will Enhance Cooperation to Uphold and Reinforce FOIP

With respect to Southeast Asia, South Asia, Pacific Island countries, the Middle East, Africa, and Latin American countries, the MOD/SDF will enhance cooperation to uphold and reinforce FOIP, utilizing a wide range of means for defense cooperation and exchanges, including cooperation and exchange of personnel, cooperation and exchange of troops, capacity building, and defense equipment and technology cooperation.

Specifically, the MOD/SDF is promoting defense cooperation and exchanges to help countries in these regions to play more effective roles in achieving stability in the Indo-Pacific region, and to secure the stable use of sea lanes by establishing good relations with these countries and ensuring that the SDF has stable access to their ports and airports.

(4) Countries with Which Japan Works to Uphold and Reinforce FOIP

The United States as Japan's ally, Australia, India, the United Kingdom, France, Germany and other European countries, Canada and New Zealand are countries that not only share fundamental values with us, but also have geographic and historical ties to the Indo-Pacific region.

The MOD/SDF has been encouraging these countries to become more involved in the Indo-Pacific region. At the same time, the MOD/SDF has also been promoting defense cooperation and exchanges with them so that we can work together as partners when promoting efforts for upholding and reinforcing FOIP in the areas listed in (3) above. This way, we aim to achieve stronger effects than when promoting efforts on our own.

(5) Expansion of FOIP

As Japan promotes defense cooperation and exchanges based on its vision of FOIP, the United States, Australia, ASEAN, India, and European countries such as the United Kingdom, France and Germany have their own initiatives and visions in the Indo-Pacific region, which are consistent with our vision of FOIP. Japan's vision

Fig. III-3-1-1 Defense Cooperation and Exchanges

Defense cooperation and exchanges

“Defense cooperation and exchanges” refers to efforts to strengthen bilateral and multilateral defense relations by using various tools, which are **significant initiatives for securing the peace and stability of Japan and the international community.**

Purpose of defense cooperation and exchanges

- To create a security environment desirable for Japan
- To deter threats from reaching Japan by making opponents realize that doing harm to Japan would be difficult and consequential
- To prevent contingencies through promoting confidence-building and mutual understanding

Tools for defense cooperation and exchanges**Tool 1: Cooperation and exchanges among people**

On such occasions as the “2+2” Meeting, defense ministerial meetings, chief of staff-level meetings or other high-level meetings, working-level consultations among defense authorities, and multilateral international conferences, participants frankly exchange views on defense policies, regional situations, defense cooperation and exchanges, etc., thereby developing mutual understanding and building confidence among them and further promoting defense cooperation and exchanges thereafter. Exchanges of students and interchange in education and research aim to facilitate understanding of defense policies and statuses of military units of other countries and promote relations of trust through network building.



Japan-Australia Defense Ministerial Meeting



Visit to Chief of the Maritime Staff by the French Navy Chief



The JPIDD Preparatory Senior Officials Meeting



Acceptance of foreign students at the National Defense Academy

Tool 2: Cooperation and exchanges among troops

Through goodwill exercise, mutual visits of naval ships and aircraft (calling at ports and airports), and exchange events among units, mutual trust with partner countries is developed and cooperative relationships are promoted. Bilateral and multilateral exercises aim to enhance SDF's capability to cooperate with troops of other countries and strengthen defense relations among relevant countries, in addition to improve personnel's skills.



Japan-India Bilateral Exercise (JIMEX) with Indo-Pacific Deployment Unit



Japan-U.S.-India-Australia Multilateral Exercise (Malabar 2020)



Japan-U.S.-Australia Multilateral Exercise (Cope North 21)



Call at Colombo Port in Sri Lanka during Indo-Pacific Deployment

Tool 3: Capacity building

Capacity building project by holding seminars and field training in various fields, providing technical guidance, and organizing observation of education and training programs and opinion exchanges, etc., aims to improve the capabilities of partner countries in a concrete and steady manner over a certain period of time and help their military forces play roles in contributing to international peace and regional stability.



Air Rescue Seminar (Vietnam)



Vehicle Maintenance Related Training (East Timor)



Online Lecture on PKO (engineering) (Cambodia)



Humanitarian Assistance and Disaster Relief (engineering equipment maintenance) (Papua New Guinea)

Tool 4: Defense equipment and technical cooperation

Through overseas transfers of equipment, joint research and development, participation in international exhibitions, and holding of the Defence Industry Forum, efforts are made to strengthen and maintain Japan's defense industrial base, enhance capacity both of the SDF and military forces of partner countries, and strengthen and maintain defense cooperation with those partner countries.



Paris Air Show



State of the Japan-India Defence Industry Forum



Crown Prince Mohammed bin Zayed viewing a C-2 Transport Aircraft at the Dubai Air Show



Minister of Defense and Ambassador of the Philippines in Tokyo confirming the conclusion of the contract regarding surveillance radar

(Reference) Conclusion of various defense cooperation agreements

Through concluding such agreements as **Agreements concerning Transfer of Defence Equipment and Technology, Acquisition and Cross-Servicing Agreements, Information Security Agreements**, the framework of cooperation has been materialized and institutionalized with the aim of promoting defense cooperation and exchanges more smoothly and consistently.



Signing of the Agreement between Japan and Indonesia concerning the Transfer of Defense Equipment and Technology [MOFA]



Signing of the Japan-India ACSA [MOFA]



Signing of the Japan-Germany Agreement on the Security of Information [MOFA]



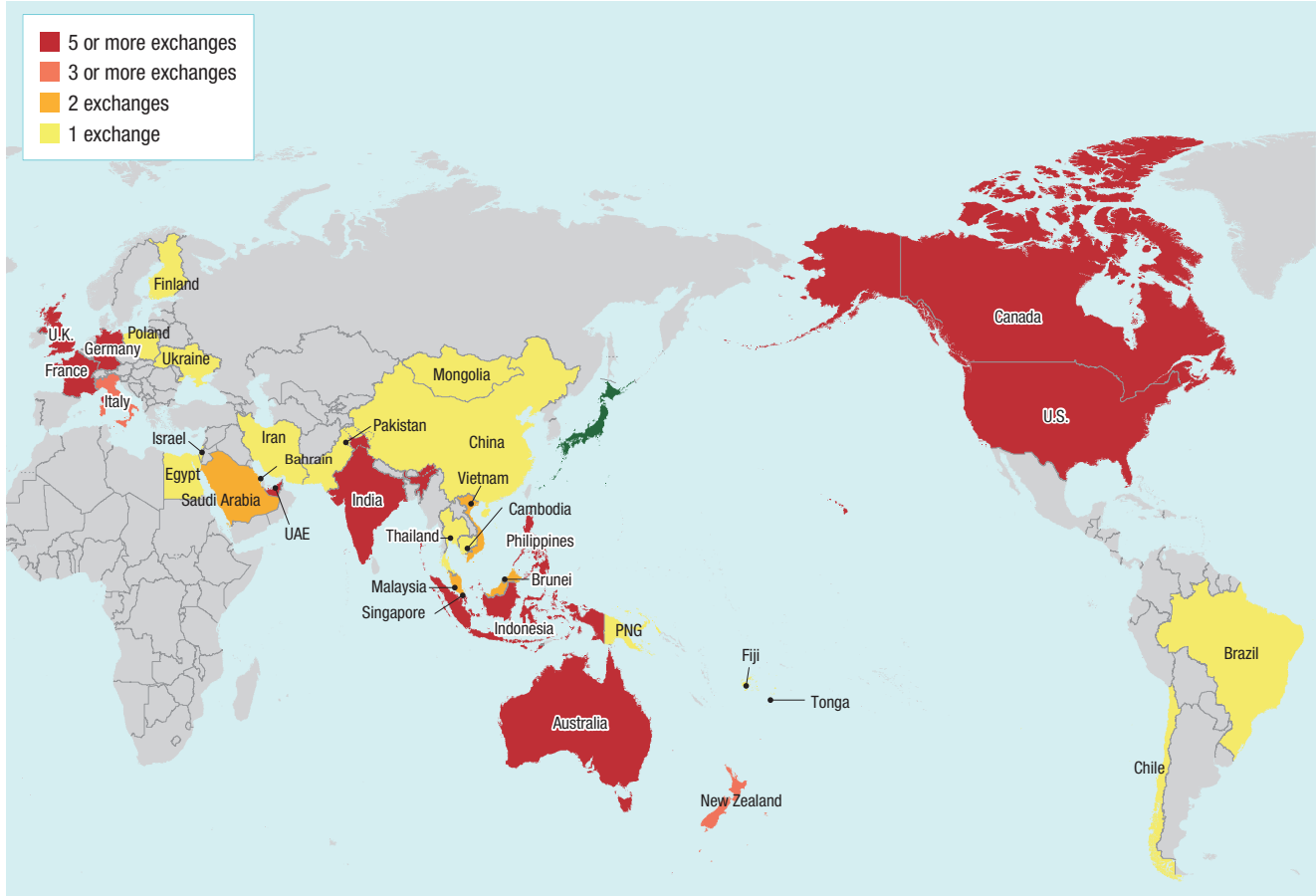
Signing of the Japan-Australia Information Security Agreement [MOFA]

Fig. III-3-1-2 Number of High-level Bilateral Dialogues and Consultations (April 2020-March 2021)

Countries with Which High-level Bilateral Dialogues and Consultations were Conducted (April 2020-March 2021)

In this figure, "high-level bilateral dialogues and consultations" refers to bilateral meetings of the Minister of Defense, State Minister of Defense, Parliamentary Vice-Minister of Defense, Administrative Vice-Minister of Defense, Vice-Minister of Defense for International Affairs, and Chiefs of Staff with their respective counterparts.

High-level bilateral dialogues and consultations were conducted with the following countries between April 2019 and March 2020, but had also been conducted with other countries prior to that period together with other types of defense cooperation and exchanges. It should be noted that Japan has conducted high-level bilateral dialogues and consultations with various countries across the globe.



of FOIP is inclusive and the MOD/SDF will continue to promote cooperation with all countries that endorse it.

(6) Countries with Which Japan Will Promote Mutual Understanding and Confidence Building

With regard to China and Russia, the MOD/SDF aims to avoid unforeseen events and ensure Japan's security by tapping into defense exchange opportunities and conveying Japan's concerns about the increased military activities and military expansion in Japan's vicinity to promote mutual understanding and confidence building.

(7) Strengthen the Organizational Structure to Promote FOIP

As efforts related to security cooperation with other countries have expanded rapidly in recent years, a

new post for civilian officials at the level of a division director was established in the Bureau of Defense Policy as of July 1, 2020, to conduct defense cooperation and exchanges with other countries under a medium- to long-term sustainable system. The new position would share duties relating to "contributing to the stability of the security environment in the Indo-Pacific region," which were part of the "duties relating to the fundamentals and coordination of international exchanges in the field of defense" that had been under the jurisdiction of the former International Policy Division of the Bureau.

It is the policy of the MOD to promote multifaceted and multi-layered security cooperation more strategically based on the vision of FOIP under the newly strengthened structure.

Fig. III-3-1-3 (MOD's Efforts under the "Free and Open Indo-Pacific" [image])

Defense Cooperation and Exchange Amidst the COVID-19 Pandemic

The spread of COVID-19 has made direct communication with other countries more difficult. In response the MOD has been even more proactive in defense cooperation and exchange through such means as high-level talks by telephone and videoconference, bilateral/multilateral naval training without human contact, and online educational capacity building programs.

It has been pointed out that COVID-19 is an issue that must be dealt with in cooperation with the international community, and that some point out the COVID-19 pandemic may expose and intensify strategic competition among countries intending to create international and regional orders more preferable to themselves and to expand their influence. In light of this, the MOD and the SDF have been promoting cooperation

regarding responding to COVID-19, including through sharing of knowledge and lessons learned by the SDF in various activities, such as infectious disease control. The MOD has also been sharing information and exchanging views to strengthen law-based international order, especially with countries that support the “Free and Open Indo-Pacific” (FOIP) initiative. Actions have also included addressing disinformation in the context of the spread of infectious diseases.

The MOD will continue to promote defense cooperation and exchange to uphold and reinforce FOIP, in cooperation with other countries that share our values and interests in order not to undermine the free and open international order that has been a cornerstone of peace and prosperity in the world.



Minister of Defense Kishi holds more frequent telephone conversations, due to the impact of COVID-19



The first capacity building program held online (Cambodia)

Fig. III-3-1-3 MOD's Efforts under the "Free and Open Indo-Pacific" (image)

MOD's Efforts under the "Free and Open Indo-Pacific" (FOIP)

Background

- In August 2016, former Prime Minister Abe unveiled the "Free and Open Indo-Pacific" concept in his keynote address at TICAD VI in Kenya.
- Japan's fundamental aim is to foster regional stability and prosperity by improving connectivity between Asia and Africa through a free and open Indo-Pacific region.

Three pillars of the "Free and Open Indo-Pacific"

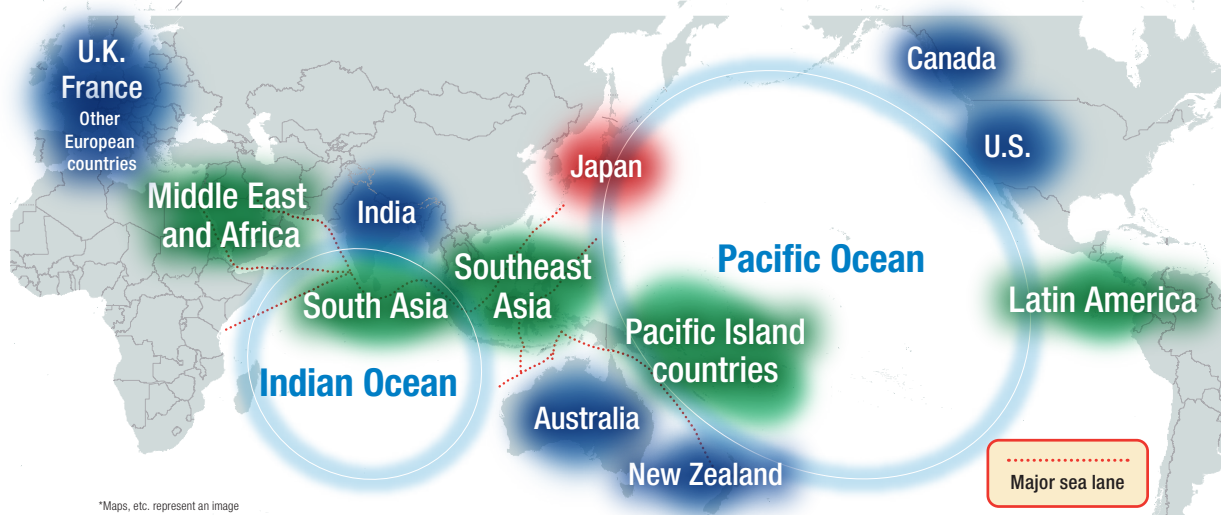
- Promotion and establishment of the rule of law, freedom of navigation and free trade
- Pursuit of economic prosperity (e.g. improving connectivity)
- Commitment to peace and stability

Direction of MOD's Efforts

- Securing the stable use of major sea lanes by way of defense cooperation and exchange activities
- Preventing contingencies through confidence building and mutual understanding
- Contributing to peace and stability through active engagement in the region, in cooperation with partner countries



MOD's Specific Efforts



*Maps, etc. represent an image

Southeast Asia, South Asia and Pacific Island countries: Areas where several key sea lanes are located

Middle East and Africa: Key region in terms of energy security

➔ Enhance cooperation for upholding and reinforcing FOIP

(Concrete initiatives)

- **Southeast Asia** ... Announcement of Vientiane Vision 2.0, an updated version of Vientiane Vision, which is a guideline for the strengthening of defense cooperation to support ASEAN's centrality and unity, continued implementation of capacity building and practice of goodwill and bilateral/multilateral exercises with countries in Southeast Asia in the Indo-Pacific Deployment (IPD), granting of decommissioned equipment (transfer of TC-90 training aircraft to the Philippines), realizing FOIP and the ASEAN Outlook on the Indo-Pacific (AOIP), which share many fundamental commonalities, etc.
- **South Asia** ... Provision of capacity building (air rescue) to the Sri Lanka Armed Forces, promotion of calling at ports and airports by SDF's assets (naval ships and aircraft) to Sri Lanka, Pakistan, Maldives and Bangladesh, etc.
- **Pacific Island countries** ... Planning of the first JPIDD (Japan Pacific Islands Defense Dialogue), as the first multilateral defense ministerial meeting for Japan, provision of capacity building (military band development) to the Papua New Guinea Military Band, etc.
- **Middle East** ... Active participation in multinational security conferences held in the Middle East, promotion of calling at ports and airports by SDF's assets (naval ships and aircraft) to Oman, UAE, Saudi Arabia and Bahrain, etc.
- **Africa** ... Provision of capacity building (enhancement of disaster response capacity) to the Djibouti Armed Forces, etc.

The United States, Australia, New Zealand, India, European countries such as the United Kingdom and France, and Canada

: Countries sharing values inherent to the FOIP vision and have ties to the region ➔ Work together as partners to uphold and reinforce FOIP

(Concrete initiatives)

- **The United States** ... Provision of capacity building (underwater medicine) to Vietnam under Japan-U.S. collaboration, implementation of Japan-U.S. bilateral exercise as part of the IPD, etc.
- **Australia and New Zealand** ... Participation in capacity building "Harii Hamutuk" sponsored by Australian Defence Force in Timor-Leste, implementation of Japan-U.S.-Australia air forces' Trilateral Exercise "Cope North," Multinational HA/DR Exercise "Christmas Drop," etc.
- **India** ... Implementation of Japan-U.S.-India-Australia Multilateral Exercise "Malabar," Japan-India Bilateral Exercise "Dharma Guardian," and Japan-India Bilateral Exercise "SHINYUU Maitri," holding of the first Japan-India 2+2 Foreign and Defense Ministerial Meeting, etc.
- **The United Kingdom and France** ... Implementation of Japan-U.K. Bilateral Exercise "Guardian North," Japan-France-U.S.-Australia-India Multilateral Naval Exercise "La Pérouse," Japan-U.K. Bilateral Army Exercise "Vigilant Isles" (the first bilateral exercise between the U.K. army and GSDF conducted in Japan in 2018), etc.

2 Promotion of Defense Cooperation and Exchanges

In promoting security cooperation and exchanges, it is important to enhance bilateral defense cooperation and exchanges using optimal combinations of various cooperative means, while taking matters such as regional situations, the situations of partner countries and their relationships with Japan into account.

1 Australia

(1) Significance of Defense Cooperation and Exchanges with Australia

Australia is a “Special Strategic Partner” for Japan in the Indo-Pacific region as both Japan and Australia are allied with the United States and share not only universal values² but also security strategic stakes and interests. In recent years, particularly, Japan and Australia as responsible countries in the Indo-Pacific region are strengthening mutual cooperation focusing on areas such as humanitarian assistance and disaster relief (HA/DR) activities and cooperation in capacity building.

With the background of the deepening defense cooperation between Japan and Australia, the two countries in March 2007 announced the Japan-Australia Joint Declaration on Security Cooperation, Japan’s first such joint declaration focusing on security with a country other than the United States. Japan and Australia have also developed the foundation for cooperation such as the Japan-Australia ACSA, the Japan-Australia Information Security Agreement, and the Agreement concerning the Transfer of Defence Equipment and Technology.

The Japan-Australia ACSA,³ which expands the scope of the mutual provision of supplies and services, was revised and signed by the two countries in January 2017. The new ACSA was concluded in light of the expansion of cases in which the SDF and the Australian Defence Force (ADF) conduct operations together due to the further advances in their defense cooperation and exchanges, and the development of the Legislation for Peace and Security in Japan. The agreement was approved by the National Diet in April 2017 and entered into force in September 2017. Relevant domestic laws were then developed.

The MOD/SDF will continue deepening its cooperative

relationship with Australia, a “Special Strategic Partner” that has both the intention and ability to contribute to the maintenance of peace and stability in the region, to deepen cooperation that further improves interoperability.

(2) Recent Major Achievements in Defense Cooperation and Exchanges

In November 2020, Prime Minister Suga held a summit meeting with the Prime Minister of Australia, Scott Morrison, in Tokyo, where the leaders determined to elevate bilateral security and defense cooperation under the Special Strategic Partnership to a new level. In this regard, the leaders reiterated their strong belief that the reciprocal access agreement between Japan and Australia (“Japan-Australia RAA”)⁴ will serve as a solid foundation for further enhancing strategic cooperation between the two countries, and welcomed the agreement in principle reached between the two countries on the Japan-Australia RAA.

In May and October that same year, Minister of Defense Kono and Minister of Defense Kishi held telephone conversations with Minister for Defence Linda Reynolds. The ministers exchanged views on regional issues, including the East China Sea and the South China Sea, and shared the view to continue to strongly promote Japan-Australia defense cooperation and exchanges to uphold and reinforce FOIP based on the Special Strategic



Minister of Defense Kishi holding a joint press conference with the Minister for Defence of Australia who visited Japan (October 2020)

² The National Security Strategy stipulates “freedom, democracy, respect for fundamental human rights, and the rule of law” as universal values.

³ Official title: Agreement between the Government of Japan and the Government of Australia concerning Reciprocal Provision of Supplies and Services between the Self-Defense Forces of Japan and the Australian Defence Force.

In addition to the activities this agreement currently applies to, the following activities and situations will also be newly subject to the agreement: (1) Internationally coordinated operations for peace and security; (2) Situations threatening international peace and security that the international community is collectively addressing; (3) Perilous situations; (4) Armed attack situations, etc.; (5) Activities in situations threatening survival; (6) Rescue measures for Japanese nationals and others overseas; (7) Counter-piracy activities; (8) Elimination of mines and other dangerous objects; and (9) Intelligence gathering activities.

⁴ A bilateral agreement between the SDF and the ADF facilitating cooperative efforts such as joint training and disaster relief activities by establishing procedures and clarifying legal status when the forces of one country visits the territory of the other.

Partnership between Japan and Australia. They also discussed cooperation on countering the spread and ramifications of COVID-19 in the Indo-Pacific region.

In October, Defense Minister Kishi held the first face-to-face defense ministerial meeting with Minister for Defence Reynolds in Tokyo since the outbreak of the COVID-19 pandemic.

At the meeting, the two ministers exchanged views on regional affairs including the East China Sea, the South China Sea, and North Korea. On the East China Sea and the South China Sea, they sent out a clear message that they reinforced their strong opposition to any attempts to unilaterally change the status quo by coercion, and expressed their intention to continue to coordinate closely. On North Korea, they reaffirmed Japan and Australia's commitment to achieve the complete, verifiable and irreversible dismantlement of all of North Korea's nuclear weapons, other weapons of mass destruction and ballistic

missiles of all ranges, and to continue their cooperation on monitoring and conducting surveillance activities against illicit ship-to-ship transfers in which North Korean flagged vessels are involved.

The ministers also resolved to pursue all means to forge deeper links across a range of defense and security interests, and concurred to enhance regular bilateral and multilateral cooperative activities in the Indo-Pacific, as well as interoperability between the SDF and the ADF. The ministers concurred to enhance mutual understanding through people-to-people exchanges, to drive bilateral space and cyber cooperation in areas of mutual benefits, and to deepen cooperation in defense science and technical collaboration.

They also concurred to continue exchanging views on areas such as sharing lessons learned from humanitarian assistance and disaster relief operations during the COVID-19 pandemic, exploring new opportunities

VOICE

Voice of Command Liaison Officer Working to Strengthen Japan-Australia and Japan-U.S.-Australia Cooperation

Major John Howlett, Australian Defence Force Ground Component Command Liaison Officer, GSDF Ground Component Command (Sagamihara City, Kanagawa Prefecture)

Since January 2021, I have been serving at the Headquarters of the Ground Component Command as liaison officer from the Headquarters of the Australian 1st Division. My main role is to improve interoperability and deepen mutual understanding between Japan and Australia and I conduct liaison in various areas including co-ordinating bilateral Japan/Australia exercises and trilateral Japan/US/Australia exercises.

I entered the Australian Defence Force's Language School in 2012 and started my study of Japanese language but at that time, I did not even dream of working inside a JGSDF unit. Afterwards, as I had a chance to study the Japanese language, I think the opportunities to participate in activities with the

JGSDF increased and I came to participate in many activities such as AASAM (Australian Army Skill at Arms Meeting, a shooting competition held in Australia), Exercise Southern Jackaroo (JGSDF's field training with U.S. and Australian Forces in Australia), Peace Keeping Operations in South Sudan and Japan-Australia Staff level talks etc. I now wish to use my experiences gained working with the JGSDF in these activities to contribute to cultural exchange and co-operation between the Australian Army and JGSDF, including in the field of combined exercises. Also, because I have experience on international Peace Keeping Operations, I also hope to contribute to the development of co-operation between both countries in the field of international activities as well.

On this occasion I am grateful to be able to serve alongside the JGSDF members and have received the precious chance to learn more. I feel it is a great honor.



The author (front) coordinating communication in a video teleconference (VTC) between the Ground Component Command and the Australian 1st Division



The author (back left) aiding coordination between Japan, the United States and Australia at an Australian 1st Division organized conference

for capacity building to build regional resilience, and working together to counter disinformation.

In addition, both ministers instructed their officials to commence the necessary coordination to create a framework to protect ADF assets by the SDF personnel under Article 95-2 of the SDF Law (Provision for the protection of weapons and other equipment of the units of the U.S. Armed Forces and armed forces of other foreign countries).

They also reaffirmed their shared commitment to continue working with Indo-Pacific partners in the fields of capacity building, maritime security, and HA/DR.

As an example of cooperation and exchange between services, the Chief of Staff, Joint Staff held a teleconference with General Angus Campbell, Chief of the Australian Defence Force, in April 2020, where they reaffirmed the importance of the Japan-Australia defense cooperation and exchanges based on FOIP. Senior SDF leadership held telephone and video teleconferences with their counterparts of the ADF on the following occasions in 2020: the Chief of Staff, Ground Self-Defense Force (GSDF) met with Lieutenant General Maxwell Burr, Chief of Army, in July and December; the Chief of Staff, Marine Self-Defense Force (MSDF) met with Vice Admiral Michael Noonan, Chief of Navy, in August; the Chief of Staff, Air Self-Defense Force (ASDF) held talks with Air Marshal Mel Hupfeld, Chief of Air Force, in May, August, and October. Each service shared the view to continue to cooperate closely in order to uphold and reinforce FOIP even under the impact of the COVID-19 pandemic.

In addition, the GSDF accepted an Australian Army liaison officer in January 2021 for the first time in Japan, and is promoting the strengthening of mutual understanding and the deepening of interoperability through personnel exchange. In September 2020, the Indo-Pacific Deployment Squadron conducted a bilateral exercise with Australian forces in the South China Sea. In November, the Destroyer JS “Shimakaze” conducted a bilateral exercise in the western waters and airspace of Kyusyu, and in March 2021, the Destroyer JS “Akebono,” on ocean training exercises, conducted a bilateral exercise in the South China Sea to improve tactical skills and enhance cooperation with the Australian Navy.

 See Reference 31 (Recent Defense Cooperation and Exchanges with Australia [Past Three Years])

(3) Cooperative Relationship, etc., among Japan, Australia and the United States

Japan and Australia share universal values and cooperate closely to resolve the various challenges the Indo-Pacific region and the international community face. In order to ensure greater effectiveness and efficiency of such cooperation, and to contribute to the peace and stability of the region, it is important for Japan and Australia, and their common ally, the United States, to proactively promote trilateral cooperation.

The Security and Defense Cooperation Forum (SDCF), a Director General-level meeting among the three countries of Japan, the United States and Australia, has been held 10 times since April 2007.

In July 2020, Minister of Defense Kono held a video teleconference with U.S. Secretary of Defense Dr. Mark Esper and Australian Minister for Defence Linda Reynolds where they reaffirmed their joint commitment to enhance security, stability, and prosperity in the Indo-



Crew of the Royal Australian Navy cruiser “STUART” waving their hats on the Destroyer JS “Ise” (September 2020)



ASDF F-15J fighter aircraft (second from the left) flying in formation with U.S. Air Force aircraft in Japan-U.S.-Australia trilateral exercises (February 2021)



Video: Japan-Australia bilateral exercise
URL: <https://fb.watch/56c5UMMNb/>

Pacific region in keeping with their shared values, long-standing alliance and close partnerships.

As for trilateral service-to-service cooperation and exchanges, in September 2020, the Chief of Staff, GSDF participated in the Japan-U.S.-Australia Senior Leaders Seminar in Hawaii. He exchanged views with the top officials of the U.S. Army Pacific, the U.S. Marine Corps Forces, Pacific, and the Australian Army, and reaffirmed their continued cooperation for FOIP. In July, October and November of that year, the MSDF conducted trilateral exercises with the United States and Australia in the South China Sea and Bay of Bengal. The MSDF also hosted a video teleconference in January 2021 with Commander Aquilino of the United States Pacific Fleet and Chief of Navy Noonan to enhance cooperation between the Japanese, U.S. and Australian navies.

From January to February 2021, the ASDF cohosted the Japan-U.S.-Australia Trilateral Exercises “Cope North 21.”

Japan will continue its efforts to improve interoperability while coordinating views on the situation and policy direction, through various opportunities with the United States and Australia.

 **See** Reference 46 (Participation in Multilateral Exercises [Past Three Years])

2 India

(1) Significance of Defense Cooperation and Exchanges with India

India is increasing its influence against a backdrop of its population (the world's second largest), its high economic growth, and its latent economic power. Located in the center of sea lanes that connect Japan with the Middle East and Africa, India is an extremely important country for Japan. Furthermore, Japan and India share universal values as well as common interests in the peace, stability, and prosperity of Asia and the world, and have established the “Special Strategic and Global Partnership.” In this context, Japan and India have promoted cooperation in maritime security and various other areas, while utilizing some frameworks including the “2+2” meeting.

Defense cooperation and exchanges between Japan and India have steadily deepened since October 2008, when the two countries signed the Joint Declaration on Security Cooperation between Japan and India. Meetings and consultations at various levels such as the ministerial



Signing of the Japan-India ACSA (September 2020) [MOFA]

level, as well as service-to-service exchanges including bilateral and multilateral exercises, have been regularly conducted. Moreover, the two countries signed the Memorandum on Defence Cooperation and Exchanges between the Ministry of Defense of Japan and the Ministry of Defence of the Republic of India in September 2014 and saw the conclusion of the Agreement concerning the Transfer of Defence Equipment and Technology as well as the Agreement between the Government of Japan and the Government of the Republic of India concerning Security Measures for the Protection of Classified Military Information in December 2015, further solidifying the institutional basis of Japan-India defense cooperation and exchanges. These agreements have strengthened the relationship between the two partners, which are capable of dealing with regional and global issues, as well as the foundation of this partnership.

(2) Recent Major Achievements in Defense Cooperation and Exchanges

In October 2018, Japan and India began negotiations for the Agreement Between the Government of Japan and the Government of the Republic of India Concerning Reciprocal Provision of Supplies and Services Between the Self-Defense Forces of Japan and the Indian Armed Forces (ACSA), signing the agreement in September 2020. That month, Prime Minister Abe held a Japan-India summit telephone talk with Prime Minister Narendra Modi of India in which they welcomed the signing of the ACSA.

The First Japan-India 2+2 Foreign and Defence Ministerial Meeting was held in November 2019, in



Video: Japan-U.S.-Australia Trilateral Exercises, etc. “Cope North 21”

URL: https://twitter.com/JASDF_abc_pao/status/1368743272412250112?s=20

which the two countries acknowledged emerging security challenges and reiterated their commitment to advancing bilateral security cooperation. In addition, the Ministers shared the view to make continuous efforts for holding the bilateral exercises between the defense forces regularly and further expanding the same. The Ministers noted the strengthening of exchange of information based on the Implementing Arrangement for Deeper Cooperation between the Japan Maritime Self-Defense Force and the Indian Navy. The Ministers looked forward to proactive discussions in the working group on the defense equipment and technology cooperation and shared views



The Destroyer JS "Ikazuchi," conducting Japan-India Maritime Exercise (JIMEX) (September 2020)



Air Self Defense Forces Chief of Staff Izutsu receiving the guard of honor from the Indian Air Force (December 2020)

on multilateral cooperation and regional issues.

In May 2020, Minister of Defense Kono held a telephone conversation with Defence Minister Shri Rajnath Singh, emphasizing that upholding and reinforcing FOIP is a common interest to both countries. The two ministers also exchanged views on bilateral defense cooperation and exchanges, taking into consideration the implications of COVID-19, concurred to resume the coordination toward the first bilateral fighter aircraft training as soon as the COVID-19 situation gets resolved and embody the deepening of Japan-India defense cooperation in a tangible way.

In December, Defense Minister Kishi held a telephone conversation with Defence Minister Singh. The two ministers confirmed achievements including the signing of the Japan-India ACSA and the successful completion of the naval exercise "Malabar," welcoming the fact that bilateral and multilateral defense cooperation and exchanges have been promoted despite the COVID-19 pandemic. The two ministers also exchanged views on regional situations, including the East China Sea and the South China Sea, and the ministers concurred in sending a clear message that they strongly oppose any attempts to unilaterally change the status quo by coercion.

As for defense equipment and technology cooperation, Japan and India have conducted the Cooperative Research on the Visual SLAM Based GNSS Augmentation Technology for UGV⁵/Robotics since July 2018.

As for major service-to-service exchanges, the Chief of Staff, Joint Staff held a telephone conversation in November 2020 with General Rawat, Chief of Defence Staff, in which they reaffirmed their intent to strengthen bilateral cooperation to further promote the "Special Strategic and Global Partnership" and the importance of promoting Japan-U.S.-Australia-India defense cooperation under FOIP. In September 2020 and March 2021, the Chief of Staff, GSDF held telephone conversation with General Naravane, Chief of the Army Staff, where they agreed to promote defense cooperation and exchanges between the Japanese and Indian armies in order to realize FOIP.

Video: Japan-India Maritime Exercise (JIMEX)
URL: <https://fb.watch/4y-Fgchiga/>

Video: Japan-U.S.-India Trilateral Exercise Malabar 2019
URL: <https://youtu.be/eKuZ1EZfz4>

⁵ "UGV" stands for "Unmanned Ground Vehicle."

VOICE

Participating in the MALABAR 2020 Japan-U.S.-India-Australia Multilateral Exercise

**Captain HIRAI Katsuhide, MSDF Escort Flotilla 1 Command,
MSDF Escort Flotilla 1
(Yokosuka City, Kanagawa Prefecture)**

As a commander of the 3rd Deployment Surface Force for Information Gathering Activities, I command JS Murasame, and from October 2020, we have performed information gathering activities in the Middle East. In November 2020, we participated in the MALABAR 2020 Japan-U.S.-India-Australia Multilateral Exercise in the northern Arabian Sea.

MALABAR 2020 was the ninth time the MSDF participated in the MALABAR. Since 2017, the MALABAR has been conducted as a trilateral exercise between Japan, the United States and India. In 2020 Australia joined the trilateral exercise. The naval exercise includes tactical maneuvering, which focuses on building ship

operational skills. JS Murasame has participated in this exercise while continuing its information gathering activities.

In the current COVID-19 crisis, we cannot carry out defense exchanges at our ports of call. This makes close naval cooperation between Japan, the United States, Australia and India, which share common values such as democracy and the rule of law, all the more important towards upholding and reinforcing a "Free and Open Indo-Pacific."

All of my unit is proud of our contribution to the safety of Japan-affiliated ships in the Middle East as the third Deployment Surface Force for Information Gathering Activities and our participation in MALABAR 2020 and the defense exchange among the four important nations of Japan, the United States, Australia and India.



The author participating in the exercise



Ships maneuvering in the MALABAR 2020 Japan-U.S.-India-Australia Multilateral Exercise

Also, in September 2020, the Chief of Staff, MSDF held a video teleconference with Chief of the Naval Staff Singh where they agreed to activate exchanges between the Japanese and Indian navies and make bilateral exercises more effective. The Chief of Staff, ASDF held a telephone conversation in April and August, and a video teleconference in September 2020, with Air Chief Marshall Bhadauria, Chief of the Air Staff, in which they reaffirmed to maintain strong cooperation between their air forces. He later visited India in December that year where he met with Air Chief Marshall Bhadauria, Defence Minister Singh, and Chief of Defence Staff Rawat. The ASDF continued exchanges with the Indian Air Force despite the COVID-19 pandemic, such as conducting expert exchanges online about treating salt damage in helicopters in October 2020.

Regarding exchanges between naval forces through exercises and training, the MSDF Training Squadron conducted a goodwill exercise in June 2020. In September, the Indo-Pacific Deployment Squadron

conducted Japan-India Maritime Exercise (JIMEX) with India.

Furthermore, the naval forces of Japan, the United States, and India have been holding the Trilateral Exercise "Malabar" since 2017. "Malabar 2020" was held in November 2020 with the addition of the Australian Navy. Through this, the four countries, sharing basic values such as democracy and the rule of law, demonstrated their cooperation and unity explicitly, as well as the realization of their unified intent to uphold and reinforce FOIP. Cooperation of the four countries such as this is extremely important. The governments of the four countries have been strengthening cooperation with efforts such as the first Japan-Australia-India-U.S. Leaders' Video Conference held in March 2021, and the MOD will continue to pursue cooperation with the United States, Australia, and India as a policy.

 See Reference 32 (Recent Defense Cooperation and Exchanges with India [Past Three Years])

3 Association of South-East Asian Nations (ASEAN)

As ASEAN member states continue to enjoy high economic growth and draw international attention to their potential as an open growth center of the world, these countries and Japan have been traditional partners sharing a history of exchanges and a close economic relationship over the past nearly 50 years.

ASEAN nations, located in strategically important areas occupying strategic points on sea lanes of Japan, are also playing an important role in ensuring the peace and prosperity of Japan as well as the entire region. Therefore, it is important for Japan to further strengthen cooperation and exchanges in the security and defense areas and promote confidence with ASEAN member states, while supporting their efforts to enhance the centrality, unity, and resilience of ASEAN, which is the center of regional cooperation.

Based on this principle, Japan is promoting confidence-building and mutual understanding through high-level and working-level exchanges as well as practical cooperation, such as capacity building, bilateral/multilateral exercises, and defense equipment and technology cooperation with ASEAN member states. In addition to bilateral cooperation, Japan has strengthened cooperation under multilateral frameworks such as the ASEAN Defence Ministers' Meeting-Plus (ADMM-Plus) and the ASEAN Regional Forum (ARF). The Vientiane Vision, which was presented as a guideline for future ASEAN-Japan defense cooperation at the second ASEAN-Japan Defence Ministers' Informal Meeting in November 2016, outlined the full picture of the future direction of defense cooperation for ASEAN as a whole in a transparent manner.

In November 2019, at the 5th ASEAN-Japan Defence Ministers' Informal Meeting held in Thailand, Defense Minister Kono announced the Vientiane Vision 2.0, an updated version of the Vientiane Vision, and ASEAN ministers welcomed it.

From the viewpoint of actively promoting such bilateral and multilateral cooperation and stabilizing the security environment of the Indo-Pacific region, the MOD will strive to further enhance defense cooperation and exchanges with ASEAN member states.

See 3 of this Section (Promotion of Multilateral Security Cooperation), p. 381
 4 of this Section (Proactive and Strategic Initiatives for Capacity Building), p. 388
 Reference 33 (Recent Defense Cooperation and Exchanges with ASEAN Member States [Past Three Years])
 Reference 45 (Vientiane Vision 2.0)



Signing of the Agreement between Japan and Indonesia concerning the Transfer of Defense Equipment and Technology (March 2021) [Ministry of Foreign Affairs]

(1) Indonesia

Indonesia conducts active defense cooperation and exchanges with Japan. During the Japan-Indonesia summit meeting in March 2015, Prime Minister Abe and President Joko agreed to strengthen their Strategic Partnership underpinned by sea and democracy and reaffirmed their intention to hold a Japan-Indonesia “2+2” Foreign and Defense Ministerial Meeting. At the first “2+2” Meeting held in Tokyo in December of the same year, the two countries agreed to initiate negotiations over an Agreement concerning the Transfer of Defense Equipment and Technology, actively participate in the Multilateral Naval Exercise KOMODO, and further advance capacity building. The Joint Statement of a Japan-Indonesia summit meeting in January 2017 confirmed the importance of continuing dialogues between their foreign and defense authorities at various levels, including the regular Japan-Indonesia “2+2” Meeting and foreign and defense authorities’ meetings.

In October 2020, Prime Minister Suga visited Indonesia for a summit meeting with President Joko Widodo. At the meeting, they agreed to hold a 2+2 meeting as soon as possible and advance discussions on the transfer of defense equipment.

In May of 2020, Minister of Defense Kono held a telephone conversation with Minister of Defence Prabowo Subianto, and then a video teleconference later in August. At both meetings, the ministers agreed to continue communication between defense authorities through information sharing, taking COVID-19 into consideration, and to continue to proactively promote defense cooperation and exchanges between the two countries toward upholding and reinforcing FOIP. Furthermore, in November 2020, Minister of Defense Kishi held a video teleconference with Minister of Defence Prabowo. The ministers exchanged views on the regional situation in the East China Sea and South China Sea, and reaffirmed the importance of a free and open



Indonesian Navy frigate "John Lie" approaching the Destroyer JS "Ikazuchi" during Japan-Indonesia goodwill exercise (October 2020)

maritime order based on the rule of law. They also agreed to further strengthen cooperation in a wide range of fields, including defense equipment and technology cooperation and prevention of the spread of infectious diseases.

In March 2021, Minister of Defense Kishi held an in-person defense ministers meeting with Defence Minister Prabowo. Minister of Defense Kishi expressed serious concern about the China Coast Guard Law. The ministers reaffirmed the need for observing international law, including the United Nations Convention on the Law of the Sea, and agreed to further provide defense cooperation and exchanges, including bilateral exercises.

That month, the Second Japan-Indonesia Foreign and Defense Ministerial Meeting ("2+2") was held in Tokyo. The ministers signed the Agreement concerning the Transfer of Defense Equipment and Technology, which entered into force that day, and had discussions on regional affairs and bilateral cooperation. Both sides exchanged their views on the situations in the East China Sea and South China Sea. Furthermore, both sides also shared serious concerns about the continued and strengthened unilateral attempts to change the status quo. They also affirmed that they would work together for peace and stability in the region and the world, based on their strategic partnership, and agreed to work closely together to become a driving force for prosperity.

In addition, various exchanges are taking place at the practical level as well.

As for major service-to-service exchanges, in September 2020, the Chief of Staff, GSDF held a telephone conversation with Air Chief Marshall Hadi Tjahjanto, the Commander of the Armed Forces, where they affirmed the importance of bilateral defense exchanges. In November 2020, the Chief of Staff held a telephone conversation with General Andika Perkasa, Chief of Staff of the Army, where they exchanged views on defense cooperation and exchanges between Japanese and Indonesian forces,

and agreed to make progress in relations centered on cooperation and exchanges in the field of humanitarian assistance and disaster relief (HA/DR).

Furthermore, in October 2020, the Indo-Pacific Deployment Squadron conducted friendly drills with the Indonesian Navy to improve tactical skills, promote mutual understanding, and strengthen relationships of trust. In November, the Chief of Staff, MSDF held a video teleconference with Admiral Yudo Margono, the Chief of Staff of the Navy, where they agreed to continue defense cooperation and exchanges through goodwill exercises and calls at ports and airports by ships and aircraft.

In February 2020, eight Indonesian military personnel were invited to participate in the Japan-Indonesia HA/DR capacity building project. Through training with the GSDF, and Japan-U.S. joint disaster prevention drills, the SDF promoted the Indonesian participants' understanding of the efforts to improve their disaster response capabilities.

(2) Vietnam

Vietnam is a coastal country facing the South China Sea with a population of approximately 95 million. Japan and Vietnam have developed cooperation and exchanges between their defense authorities. At the Japan-Vietnam summit meeting held in March 2014, the two leaders agreed to elevate the relationship between the two countries to an "Extensive Strategic Partnership." At the Japan-Vietnam summit meeting in May 2018, both countries confirmed that they would strengthen cooperation in the security and defense areas.

At the Japan-Vietnam Defense Ministerial Meeting in April 2018, the "Joint Vision Statement on Japan-Vietnam Defense Cooperation (Japan-Vietnam Joint Vision Statement)" was signed to further promote Japan-Vietnam defense cooperation and exchanges in the future. In the meeting, concerning the regional situation in the South China Sea, both ministers called for self-restraint in unilateral actions, including militarization, to change the status quo, and agreed on the importance of peaceful resolutions of disputes in accordance with international law and an early conclusion of an effective Code Of Conduct in the South China Sea.

In May 2019, then Defense Minister Iwaya visited Vietnam for the first time as Japanese defense minister in about three and a half years, and held a Japan-Vietnam Defense Ministerial Meeting with Defense Minister Lich. At the meeting, the Ministers concurred with policy orientation towards promoting Japan-Vietnam defense cooperation in a broad range of fields in line with the Joint Vision Statement announced in 2018. Regarding the regional situation, they agreed to cooperate toward denuclearization of North Korea, shared concerns about



A C-130 transport aircraft that landed at Tan Son Nhat International Airport (Vietnam) for overseas flight training (March 2021)

the unilateral moves in the South China Sea to change the status quo and establish the change as a fait accompli, and agreed that Japan and Vietnam should closely work together on these issues.

In addition, the Memorandum on the Orientation of Promotion of Defense Industry Cooperation was signed by the defense authorities of Japan and Vietnam at the vice-ministerial level. The two countries agreed to promote bilateral cooperation on defense equipment and technology based on this memorandum. Furthermore, at the Japan-Vietnam Leaders' Working Lunch held in July 2019, the leaders agreed on commencing negotiations for an agreement concerning the transfer of defense equipment and technology. At the Japan-Vietnam summit meeting held in Vietnam in October 2020, the two leaders welcomed the conclusion of a consensus in principle on the Agreement concerning the Transfer of Defense Equipment and Technology. In November, Defense Minister Kishi held a video teleconference with Defense Minister Lich to welcome this consensus. The ministers also concurred on promoting defense cooperation in the field of prevention of the spread of infectious diseases in light of the impact of the COVID-19 pandemic.

In addition, in June, the Vice-Minister of Defense for International Affairs held vice-ministerial level talks with Senior Lieutenant General Nguyen Chi Vinh, Vice-Minister of National Defence, where they exchanged views on bilateral defense cooperation and exchanges.

Japan and Vietnam will co-chair framework of the Experts' Working Group (EWG) in the PKO field held under the ADMM-Plus from 2021 to 2024.

Regarding major service-to-service exchanges, in April 2020, when a MSDF P-3C patrol aircraft visited Vietnam on its return from counter-piracy operations, it safely returned to Japan in June, despite an engine malfunction, with the help of the Vietnamese Government. Furthermore, in October 2020, the Destroyers JS "Kaga" and "Ikazuchi" and the submarine "Shoryu," as part of the Indo-Pacific Deployment, visited Kamran International

Port for replenishment.

In March 2021, an ASDF U-4 multi-purpose support aircraft, C-2 and C-130H transport aircraft conducted overseas flight training to Vietnam to learn the air routes and regional characteristics in Asia, and to improve capabilities to carry out overseas missions.

As for capacity building, the ASDF held a cybersecurity seminar in Hanoi in January 2020 in order to improve incident response capabilities for 17 key cybersecurity personnel of the People's Army of Vietnam. In March, the ASDF held an air rescue seminar in Hanoi to share the recognition of the importance of air rescue.

It is a policy that Japan and Vietnam strengthen their relationship in order to achieve more concrete and practical cooperation, based on the memorandum on the "Japan-Vietnam Joint Vision."

(3) Singapore

In December 2009, Singapore became the first country in Southeast Asia to sign a memorandum on defense exchanges with Japan. Since then, the cooperative relationship, including port calls, has been progressing steadily based on the memorandum. Singapore and Japan have so far conducted 16 meetings on a regular basis between their defense authorities. Moreover, the two countries actively conduct high-level defense exchanges as Japan's Minister of Defense attends the Shangri-La Dialogue organized by the International Institute for Strategic Studies (IISS) almost every year to explain Japan's security policy.

In May 2020, Minister of Defense Kono held a telephone conversation with Dr. Ng Eng Hen, Singapore Minister for Defence, where they exchanged views on issues such as defense cooperation and exchanges between Japan and Singapore, including regional issues and how countries can work together to contain the global spread of the pandemic. In December 2020, Minister of Defense Kishi held a video teleconference with Minister for Defence Ng, in which they welcomed the fact that bilateral defense cooperation and exchanges have been progressing despite the COVID-19 pandemic, and concurred in strengthening cooperation between both countries in support of an inclusive and open regional security architecture.

Even at the working level, the in-person Military to Military Dialogue was held for the first time in three and a half years in Singapore in November, despite limitations imposed by the pandemic where views were exchanged on defense cooperation and exchanges and regional issues.

Regarding major service-to-service exchanges, in August 2020, the Chief of Staff, JS held a video teleconference with Lieutenant-General Melvyn Ong,



NOGUCHI Yasushi, Director General for International Affairs of the Bureau of Defense Policy, paying a courtesy call with the Singaporean Permanent Secretary (November 2020) [Ministry of Defense, Singapore]

Chief of Defence Force, where they affirmed the importance of promoting Japan-Singapore defense cooperation. In November, the Chief of Staff, GSDF held a telephone conversation with Major-General Goh Si Hou, Chief of Army, where they agreed to further strengthen defense cooperation and exchanges between the Japanese and Singapore armies in order to uphold and reinforce FOIP.

Between the two navies, in June 2020, the MSDF Oversea Training Cruise Squadron conducted goodwill exercise with the Singapore Navy to promote mutual understanding and relationships of trust. In September, the Chief of Staff, MSDF held a video teleconference with Rear-Admiral Aaron Beng, Chief of Navy, where they agreed to continue calling at ports and airports by ships and aircraft and to strengthen relations between the two navies.



Minister of Defense Kishi holding a video teleconference with the Secretary of National Defense of the Philippines (October 2020)

Additionally, MSDF vessels have been making port calls, and actively conducting service-to-service exchanges during international operations such as counter-piracy operations and UN peacekeeping operations.

(4) The Philippines

Between Japan and the Philippines, a coastal state in the South China Sea and an ally of the United States, there are frequent mutual visits by naval vessels, working-level exchanges including Military-Military Consultation, and service-to-service exchanges along with high-level exchanges. At the Japan-Philippines Defense Ministerial Meeting between then Minister of Defense Nakatani and then Secretary of National Defense Gazmin held in January 2015, the two Ministers signed a memorandum on defense cooperation and exchanges. This memorandum shows the intention of the two countries to conduct cooperation in non-traditional security areas, such as maritime security, in addition to defense ministerial meetings and vice-ministerial consultations on a regular basis, reciprocal visits between the SDF Chief of Staff, JS and the Chiefs of Staff of the each SDF Service, and the Chief of Staff of the Armed Forces of the Philippines and the Commander of each service, and participation in training and exercises.

At the Japan-Philippines summit meeting in November 2015, Prime Minister Abe and then President Aquino reached a consensus in principle on the Agreement concerning the Transfer of Defense Equipment and Technology, which entered into force in April 2016.

At the Japan-Philippines summit meeting in September 2016, Prime Minister Abe and President Duterte agreed on the transfer of MSDF TC-90 training aircraft to the Philippines in order to enhance its capabilities in HA/DR, transportation, and maritime situational awareness. Two TC-90s were delivered in March 2017 and three TC-90s in March 2018, which completed the transfer of a total of five TC-90s to the Philippine Navy.

Moreover, at the Japan-Philippines Defense Ministerial Meeting between then Defense Minister Onodera and Secretary of National Defense Lorenzana held on the sidelines of the Shangri-La Dialogue in June 2018, Japan confirmed that it would grant GSDF's decommissioned UH-1H utility helicopters parts and maintenance equipment to the Philippine Air Force. The delivery of parts began in March 2019, and was completed in September of the same year.



Video: FY2020 MSDF overseas training cruise
URL: https://www.youtube.com/watch?v=5h_9zAbt8L8

At the Japan-Philippines Defense Ministerial Meeting in April 2019, then Defense Minister Iwaya and Secretary of National Defense Lorenzana welcomed the progress in cooperation, including the grant of TC-90s and UH-1H parts and maintenance equipment, and its contributions to the improvement of HA/DR and surveillance capabilities of the Philippines. They also confirmed the progress in Japan-Philippines defense cooperation, including port calls, in a broad range of fields and agreed that the two countries will further strengthen defense cooperation in the future. In August 2020, the Department of National Defense of the Philippines and Mitsubishi Electric Corporation signed a contract to supply air surveillance radar systems. This was Japan's first overseas transfer of completed equipment based on the three principles on Transfer of Defense Equipment and Technology.

High-level exchanges between Japan and the Philippines have also been deepening. Following his boarding on Destroyer JS "Izumo" in June 2017, President Rodrigo Duterte came aboard Destroyer JS "Kaga," which made a port call at the Port of Subic during the Indo-Pacific Deployment in September 2018, to meet then Parliamentary Vice-Minister of Defense Ono and exchange opinions on the bilateral relationship.

In May 2020, Minister of Defense Kono held a telephone conversation with Secretary of the National Defense Delfin N. Lorenzana. At the meeting, the two ministers shared their strong opposition to any attempts to unilaterally change the status quo by coercion or any activities that escalate tension, taking into account events in the East China Sea and South China Sea.


In October 2020, Minister of Defense Kishi held a video teleconference with Secretary of the National Defense Lorenzana, where Minister of Defense Kishi welcomed the conclusion of a contract for air surveillance radar systems. He also expressed his intention to promote Japan-Philippines defense cooperation in the context of preventing the spread of infectious diseases, in light of the impact of the COVID-19 pandemic.

As for major service-to-service exchanges, in August 2020, the Chief of Staff, GSDF held a telephone conversation with General Cirilito Elola Sobejana, Chief of the Army, in which they welcomed the decision to transfer air surveillance radar systems to the Philippines, and agreed to uphold and reinforce FOIP by promoting defense cooperation and exchanges between the Japanese and Philippine armies.

In July 2020, the Chief of Staff, MSDF held a video teleconference with Vice Admiral Giovanni Bacordo, Chief of the Navy, where they confirmed the importance of exchanges between the two navies during the COVID-19 pandemic, as well as to enhance the effectiveness of bilateral/multilateral exercises. That

month, the Destroyer JS "Teruzuki" conducted a bilateral exercise with the Philippine Navy in the South China Sea to improve tactical skills and strengthen cooperation. A C-90 provided by the MSDF participated from the Philippine Navy during the exercise.

The Chief of Staff, ASDF held a telephone conversation in April, and a video teleconference in November 2020, with Lieutenant General Allen T. Paredes, the Commanding General of the Air Force, where they exchanged views on security issues and defense cooperation between the air forces, and agreed to continue strengthening cooperation to ensure peace and stability in the region in light of the transfer of air surveillance radar systems to the Philippines.

 Part IV, Chapter 2, Section 5-3 (Building New Defense Equipment and Technology Cooperation), p. 458

(5) Thailand

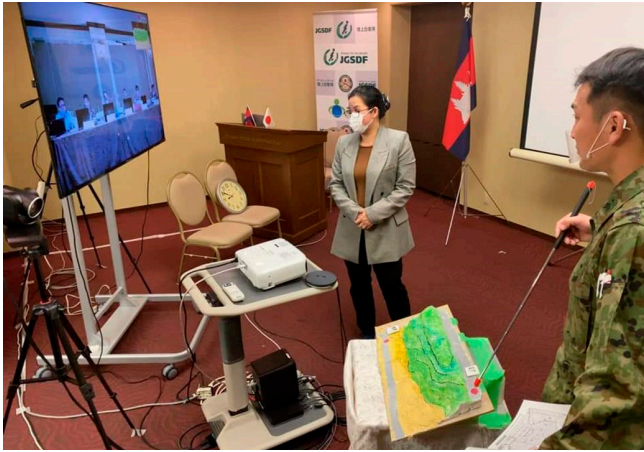
With Thailand, Japan has longstanding defense cooperation and exchanges based on the traditionally good relationship between the two countries, including the commencement of the dispatch of Defense Attachés and consultations between their defense authorities from early years. At the National Defense Academy, a Thai student became the first foreign student to be accepted in 1958. Since then, Thailand has sent the largest cumulative number of students to the academy.

Since 2005, the MOD/SDF has participated in the Multilateral Exercise "Cobra Gold" cohosted by the United States and Thailand. Most recently, the MOD/SDF participated in "Cobra Gold 20" held from January to March 2020, and conducted training on the rescue of Japanese nationals overseas to enhance joint operation capabilities.

In November 2019, Defense Minister Kono met with Prime Minister and Defense Minister Prayut on the occasion of the 6th ADMM-Plus. During the meeting, Defense Minister Kono stated that Japan would like to promote cooperation such as port calls by vessels and aircraft, SDF's participation in the Multilateral Exercise "Cobra Gold," and holding staff talks. In response, Minister Purayuth stated that Thailand welcomes these measures. Both ministers agreed to further enhance defense cooperation in broad fields based on the Memorandum of Arrangement between the Ministry of Defense of Japan and the Ministry of Defence of the Kingdom of Thailand on Cooperation and Exchanges in the Field of Defense they had signed.

In July 2020, the Vice-Minister of Defense for International Affairs held a video teleconference with the Director-General of the Office of Policy and Planning, Ministry of Defence of the Kingdom of Thailand.

As for recent service-to-service exchanges, in



A GSDF member giving an online lecture on road surveying to the Cambodian Army (February 2021)

September 2020, the Chief of Staff, JS held a video teleconference with Chief of Defense Forces Pornpipat to share their understanding of the regional situation and the strengthening of bilateral defense cooperation and exchanges.

(6) Cambodia

In 1992, Cambodia became the first country to which Japan sent an SDF unit for UN PKO. As indicated by Japan's capacity building for Cambodia since 2013 and other programs, defense cooperation and exchanges between the two countries have made steady progress. At the Japan-Cambodia summit meeting in December 2013, the bilateral relationship was upgraded to a "strategic partnership." After the summit meeting, then Defense Minister Onodera signed the Memorandum on Defense Cooperation and Exchanges between the Ministry of Defense of Japan and the Ministry of National Defense of the Kingdom of Cambodia.

In September 2017, then Defense Minister Onodera held a ministerial meeting with Cambodian Deputy Prime Minister and Minister of National Defense Tea Banh and gave high appreciation to progress in the Japan-Cambodia defense cooperation, including capacity building and service-to-service exchanges.

As for recent service-to-service exchanges, in September 2020, the Chief of Staff, GSDF held a telephone conversation with General Hun Manet, deputy Commander-in-Chief of Royal Cambodian Armed Forces and Commander of Royal Cambodian Army. At the meeting, they shared views on responses to the COVID-19 pandemic and defense cooperation and exchanges between the two armies, and agreed to further strengthen cooperation.

Regarding capacity building, in February 2021, the GSDF conducted online engineering activities (training road surveying instructors) in support of UN PKO for the

Royal Cambodian Armed Forces. It was the first lecture of the capacity building program to be held online for the MOD/SDF. The SDF will continue to support capacity building in this way by any possible means, despite the impacts of the COVID-19 pandemic.

(7) Myanmar

Japan has been promoting exchanges with Myanmar since Myanmar's transition from military rule to democratic government in March 2011, including the first visit to the country by the Administrative Vice-Minister of Defense and the invitation of Myanmar to participate in multilateral conferences hosted by Japan. In November 2013, the two countries' defense authorities held their first consultation in Myanmar's capital of Naypyidaw. In November 2014, then Defense Minister Eto held a meeting with then Defense Minister Wai Lwin of Myanmar and they confirmed their intention to promote defense exchanges, while visiting Myanmar for the Japan-ASEAN Ministerial Roundtable Meeting chaired by Myanmar.

Under the Japan-Myanmar Military Officials Exchange Program sponsored by the Nippon Foundation since 2014, general officers in Myanmar have been invited to visit SDF facilities in Japan. In October 2019, Commander-in-Chief of the Myanmar Armed Forces Min Aung Hlaing visited the Chief of Staff, JS for the first time to confirm the promotion of defense cooperation and exchanges between the SDF and the Myanmar Armed Forces under the FOIP initiative. In November 2019, Defense Minister Kono held a meeting with Defense Minister Sein Win on the occasion of the 6th ADMM-Plus, and they agreed to further enhance defense cooperation in broad fields and exchanged views on the regional situation.

Regarding capacity building, the ASDF held a seminar in the field of aviation meteorology in January 2020. In the field of underwater medicine, in the same month, Myanmar's military forces have been invited to learn about deep-sea diving training equipment and hyperbaric oxygen therapy equipment, where there was a lively exchange of opinions. That same month, an underwater medicine seminar was held in Yangon to promote understanding by presenting cases and exchanging views on underwater medicine. In May 2018, Japan started to assist the establishment of a learning environment of the Japanese language for the Japanese Language Department of the Defense Services Academy of Myanmar.

(8) Laos

Since 2014, Japan and Laos have served as co-chairs of the EWG on HA/DR of the ADMM-Plus meeting, while the relationship between the two countries' defense authorities has made significant strides through cooperation under

multilateral frameworks. In November 2016, then Defense Minister Inada became the first Japanese defense minister to visit Laos, exchanging views with Minister of National Defense Lieutenant General Chansamone regarding policies for further defense cooperation, such as high-level exchanges and capacity building, and agreeing with him to promote defense cooperation and exchanges between the two countries.

In October 2019, Deputy Defense Minister Yamamoto met with Deputy Defense Minister Onsi, who had been invited as a special speaker at the 11th Japan-ASEAN Defense Vice-Ministerial Forum. After the meeting, the Memorandum between Japan and Laos on Defense Cooperation and Exchange was signed. The two vice ministers agreed that the two countries will promote defense cooperation in a wide range of fields, including HA/DR, based on the memorandum.

In February 2020, the Lao People's Army commanding personnel and operators (engineers) were invited to Japan for the first time on HA/DR as part of its capacity building program. In order to improve the disaster response capability of the Lao People's Army, commanding personnel were instructed on construction management (process management, quality control, safety management), such as road restoration, while operators were taught the basic operation procedure of engineering equipment (heavy machinery).

(9) Malaysia

Japan signed the Agreement concerning the Transfer of Defense Equipment and Technology with Malaysia, a coastal state in the South China Sea, in April 2018. In September 2018, then Minister of Defense Mohamad Sabu visited Japan and signed with then Minister of Defense Onodera the memorandum on Japan-Malaysia defense cooperation and exchanges. In the Defense



Chief of Staff, JS Yamazaki holding a video teleconference with the Chief of Defence Forces of Malaysia (September 2020)

Ministerial Meeting held after the signing, the two Ministers confirmed their intention to make defense cooperation more concrete in various fields including service-to-service exchanges based on the memorandum.

In July 2020, Minister of Defense Kono held a telephone conversation with Defense Minister Ismail Sabri. At the meeting, the ministers shared the efforts of their defense forces to combat the COVID-19 pandemic and exchanged views on regional issues, including the East China Sea and the South China Sea. Minister of Defense Kono expressed his strong opposition to any attempts to unilaterally change the status quo by coercion, and shared the importance of a free and open maritime order based on the rule of law. Both ministers reaffirmed they would deepen defense relations between their countries based on their common interests.

As for service-to-service exchanges, in September 2020, the Chief of Staff, JS held a video teleconference with General Affendi Buang, Chief of Defence Forces, where they affirmed the importance of promoting Japan-Malaysia defense cooperation.

(10) Brunei

Regarding Japan's relations with Brunei, a coastal state in the South China Sea, during the Second ADMM-Plus meeting held in Brunei in August 2013, then Defense Minister Onodera held talks with Brunei's then Minister of Energy Mohammad Yasmin Umar and exchanged views on the ADMM-Plus initiatives. In March 2020, the Vice-Minister of Defense for International Affairs visited Brunei and paid a courtesy call on Minister of Defence II of Brunei, the Honorable Pehin Halbi, where they shared the view to further develop bilateral defense cooperation. In July the same year, the Vice-Minister of Defense for International Affairs held a telephone conversation with Permanent Secretary of Defense Dato Shahril.

4 Republic of Korea (ROK)

(1) Significance of Japan-ROK Defense Cooperation and Exchanges, Recent Major Achievements

Both Japan and the ROK confront wide-ranging and diverse security challenges, including response to the nuclear and missile issues of North Korea, response to large-scale natural disasters, counterterrorism measures, counter-piracy measures, and maritime security.

On the other hand, issues between the defense authorities of Japan and the ROK are affecting bilateral defense cooperation and exchange. Examples include the ROK's response to the MSDF's flags⁶ at an international fleet review ceremony hosted by the ROK in October

⁶ As for MSDF's ship flag, see the MOD website (<https://www.mod.go.jp/j/publication/net/shiritai/flag/index.html>)

2018, the fire-control radar irradiation of an MSDF aircraft by an ROK Navy destroyer in December 2018,⁷ military exercises by the ROK Navy in the sea surrounding Takeshima, and the ROK's termination notification of the Japan-ROK General Security of Military Information Agreement (GSOMIA) (however, the termination notification was later suspended). As the ROK defense authorities continue to take negative actions, the MOD/SDF continues to call on the ROK to appropriately deal with these concerns so as not to impair the cooperation between Japan and the ROK, and between Japan, the ROK and the United States.

In November 2019, Defense Minister Kono held a meeting with Minister of National Defense Jeong Kyeong-doo on the occasion of the 6th ADMM-Plus. Defense Minister Kono stated that Japan-ROK bilateral relations as well as the trilateral relations between Japan, the ROK and the U.S. are extremely significant in the severe security environment surrounding Japan and the ROK although the defense relations between the two countries have been extremely sour because of various bilateral issues since 2018. The two Ministers agreed that the two defense authorities would continue their communication.

(2) Japan-U.S.-ROK Cooperative Relationship

Since Japan, the United States, and the ROK share common interests pertaining to the peace and stability of this region, it is important for the three countries to seize opportunities to promote close cooperation in addressing various security issues, including those regarding North Korea.

Japan, the United States, and the ROK have conducted a Trilateral Defense Ministerial Meeting on the sidelines of the Shangri-La Dialogue. In June 2019, then Defense Minister Iwaya, ROK Minister of National Defense Jeong Kyeong-doo, and then U.S. Acting Secretary of Defense Patrick Shanahan convened the Trilateral Defense Ministerial Meeting. The three Ministers recognized the international community's shared goal of North Korea's full compliance with its international obligations in accordance with all relevant UN Security Council Resolutions, which call for North Korea's complete denuclearization in a verifiable and irreversible manner.

They underscored commitment to cooperation and coordination with the international community for fully implementing UN Security Council Resolutions, including sustained international cooperation to deter, disrupt, and ultimately eliminate North Korea's illicit



Japan-U.S.-Australia-ROK Multilateral Exercise "Pacific Vanguard 20" (September 2020)

ship-to-ship transfers. Regarding regional security issues, the Ministers reaffirmed that freedom of navigation and overflight must be ensured, and that all disputes should be resolved in a peaceful manner in accordance with the principles of international law. Based on this view, they shared the recognition of strengthening security cooperation between Japan, the United States and the ROK.

At the Japan-U.S.-ROK Defense Ministerial Meeting held by Defense Minister Kono, ROK Minister of National Defense Jeong Kyeong-doo, and U.S. Secretary of Defense Mark Esper on the occasion of the 6th ADMM-Plus in November 2019, the three ministers committed to further trilateral security cooperation, including information sharing, high-level policy consultation, and bilateral/multilateral exercises, based on the international community's shared goal, which calls for North Korea's complete denuclearization as well as the abandonment of ballistic missiles in a verifiable and irreversible manner, North Korea's full compliance with its international obligations in accordance with all relevant UN Security Council Resolutions, and the importance of a rules-based order.

At the working level, the three countries have cooperated with each other while closely sharing information through such opportunities as Director-General and Director level meetings and video teleconferences based on the framework of the Japan-U.S.-ROK Defense Trilateral Talks (DTT), as well as chief-of-staff level meetings.


In May 2020, a plenary meeting of Director-Generals was held in the form of a video teleconference. The representatives of the three countries reaffirmed the importance of trilateral cooperation as well as cooperation with the international community for the shared goal of North Korea's full compliance with

⁷ In December 2018, Gwanggaeto-daewang, the Great class destroyer of the ROK Navy, directed a fire control-radar at a MSDF patrol aircraft conducting warning and surveillance activities off the coast of Noto Peninsula (within Japan's exclusive economic zone). Taking the incident seriously, in January 2019, the MOD published its final statement, compiling objective facts, and has been urging the Korean side to take recurrence prevention measures. The SDF patrol aircraft was flying while keeping sufficient altitude and distance, and did not fly in a way that could have threatened the Korean navy vessel. The MOD will expend all possible means to monitor the situation and gather intelligence. For details, see the MOD website (https://www.mod.go.jp/en/d_act/radar/index.html).

its obligations in accordance with all relevant UNSC resolutions, and also exchanged views on the status of each country's response to COVID-19.

As for service-to-service exchange, the Chief of Staff, JS visited the United States in November to participate in the Japan-U.S.-ROK chiefs of staff video teleconference. At this meeting, the Chief of Joint Staff, General Mark Milley, U.S. Chairman of the Joint Chiefs of Staff, and General Won In-choul, ROK Chairman of the Joint Chiefs of Staff, discussed trilateral defense cooperation from the viewpoint of promoting the peace and stability of Northeast Asia. Also, in September, the MSDF conducted the Japan-U.S.-Australia-ROK Multilateral Exercise "Pacific Vanguard 20" in the sea and airspace around Guam to improve tactical skills and strengthen cooperation with the navies of each participating country.

The three countries need to enhance their security cooperation in various areas into the future, taking advantage of various available opportunities.

 See Reference 46 (Participation in Multilateral Exercises [Past Three Years])

(3) Japan-ROK GSOMIA


Based on the Trilateral Information Sharing Arrangement Concerning the Nuclear and Missile Threats Posed by North Korea signed in December 2014, the defense authorities in Japan and the ROK have exchanged and shared classified information regarding North Korea's nuclear weapons and missiles via the United States.

In light of the increasingly serious situation surrounding North Korea with its frequently repeated ballistic missile launches and nuclear tests, in November 2016, the GSOMIA was concluded between Japan and the ROK to further promote bilateral cooperation. This agreement serves as a framework to appropriately protect classified military information shared between the Japanese and ROK governments. In August 2019, the Government of the ROK notified the Government of Japan of its intention to terminate the GSOMIA in writing. However, in November 2019, the ROK Government notified Japan that it would cease its termination of the agreement.⁸ Minister of Defense Kono commented that Japan-U.S. and Japan-ROK bilateral cooperation and Japan-U.S.-ROK trilateral cooperation are important amid the severe security environment in East Asia, and that he considered that the ROK Government made its decision from a strategic perspective taking into account the current security situation in the region.

 See Reference 34 (Recent Japan-ROK Defense Cooperation and Exchanges [Past Three Years])

5 European Countries, Canada, and New Zealand

European countries, Canada, and New Zealand share universal values with Japan and play a central role in initiatives to address common challenges to global security, with a primary focus on non-traditional security areas, such as counter-terrorism and combating illicit ship-to-ship transfers, as well as international peace cooperation activities. In this regard, promoting defense cooperation and exchanges with these countries provides the foundations for Japan to become actively involved in dealing with these challenges and this is important for all of Japan, European countries, Canada, and New Zealand.

 See Reference 35 (Recent Defense Cooperation and Exchanges with European Countries, Canada and New Zealand [Past Three Years])

(1) The United Kingdom

The United Kingdom, being a major power that has influence not only in Europe but also in the rest of the world, has historically maintained close relations with Japan. On the security front, Japan shares the same strategic interests as the United Kingdom, as both countries are important allies of the United States. Given this relationship, it is extremely important for Japan to promote cooperation with the United Kingdom by working together on global issues, such as international peace cooperation activities, counterterrorism, counter-piracy operations and cybersecurity as well as by exchanging information on regional situations.

With regard to Japan's relationship with the United Kingdom, the Memorandum on Defence Cooperation was signed in June 2012. Following this, the Agreement concerning the Transfer of Defence Equipment and Technology came into effect in July 2013 and the Japan-U.K. Information Security Agreement entered into force in January 2014, leading to the development of a foundation for defense equipment and technology cooperation as well as information sharing between the two countries. At the Japan-U.K. summit meeting in May 2014, the prime ministers of both countries agreed to hold a Japan-U.K. "2+2" Foreign and Defence Ministerial Meeting and begin negotiations on the ACSA in order to enhance bilateral cooperation in the security field.

⁸ The provision of the GSOMIA on termination of the agreement is as follows:

ARTICLE 21 ENTRY INTO FORCE, AMENDMENT, DURATION AND TERMINATION (excerpt)

3. This Agreement shall remain in force for a period of one year and shall be automatically extended annually thereafter unless either Party notifies the other in writing through the diplomatic channel ninety days in advance of its intention to terminate the Agreement.



Japan-U.K. Foreign and Defence Ministers' Meeting ("2+2") conducted online (February 2021)

In January 2017, the Japan-U.K. ACSA⁹ was signed. After the approval by Japan's National Diet in April 2017, the ACSA entered into force in August. Relevant domestic laws were then developed. The effectuation of the Japan-U.K. ACSA enables the two countries to implement the mutual provision of supplies and services, such as water, food, fuel and transportation, between the SDF and the U.K. Armed Forces through unified procedures in bilateral exercises and large-scale disaster relief operations, further facilitating and strengthening the Japan-U.K. strategic partnership.

The Japan-U.K. Joint Declaration on Security Cooperation, issued during the Japan-U.K. summit meeting in August 2017, stipulated that the two countries agreed to develop an action plan with specific measures relating to bilateral security cooperation between the relevant authorities. At the Japan-U.K. summit meeting in January 2019, the leaders reaffirmed the above Declaration and confirmed that the bilateral relationship had entered the next phase.

In April 2020, Minister of Defense Kono held a telephone conversation with H.E. the Rt Hon Ben Wallace, Secretary of State for Defence. The two ministers exchanged views on issues such as the roles to be played by the defense authorities and bilateral defense cooperation and exchanges, taking into consideration the implications of COVID-19. They also agreed to vigorously promote bilateral defense cooperation and exchanges to uphold and reinforce FOIP.

In January 2021, Defense Minister Kishi held a video teleconference with Secretary of State for Defence Wallace, where they agreed to cooperate in efforts to address the risks of infectious diseases that could affect security. The Japan-UK Foreign and Defence Ministers' Meeting ("2+2") was held in February via a video teleconference for the first time in about three years.

The four ministers affirmed that, at a time when the security environment surrounding Japan and the U.K. is undergoing changes, and basic values and principles are facing challenges, the two countries, as global strategic partners, would further enhance cooperation towards the realization of FOIP.

The ministers shared the view to coordinate towards the implementation of bilateral/multilateral exercises during this visit by U.K. aircraft carrier "Queen Elizabeth" and her carrier strike group to the region including East Asia in 2021, and welcomed the signing of a Maritime Security Arrangement to further security cooperation between the MSDF and the British Royal Navy, as well as the steady progress both on bilateral ground exercises and on defense equipment and technology cooperation.

Minister of Defense Kishi conveyed his serious concerns on the China Coast Guard Law, and the four ministers shared their serious concerns about the situation in the East China Sea and South China Sea, strongly opposed unilateral attempts to change the status quo by force and confirmed the importance of a free and open maritime order based on the rule of law.

In March, following the announcement of the Integrated Review of Security, Defence, Development and Foreign Policy, Minister of Defense Kishi held a telephone conversation with Secretary of State for Defence Wallace, and received an explanation of the Integrated Review. On this occasion, Minister Kishi highly commended the U.K.'s strategic decision on the "tilt to the Indo-Pacific region," which was expressed in the Integrated Review, and welcomed the Integrated Review as something that explicitly maps out the direction of a strengthened Japan-U.K. cooperative relationship in the mid- to long-term toward upholding and reinforcing FOIP.

Regarding the East China Sea and the South China Sea, the two ministers once again expressed their will to strongly oppose any action which attempts to change the facts on the ground, coercion, or any activities that escalate tension regarding the situation, and concurred that a free and open maritime order based on the rule of law, in particular the U.N. Convention on the Law of the Sea, is important. Minister Kishi also expressed the Japanese serious concerns over the China Coast Guard Law. The two ministers referred to the launching of two ballistic missiles by North Korea on the day of the meeting, and strongly condemned the launches as a threat to the peace and stability of the region that violates UNSC resolutions, and shared the view that the repeated launches of ballistic missiles by North Korea thus far is a serious challenge to the international community as a whole.

⁹ The ACSA applies to the following activities: (1) bilateral/multilateral exercises; (2) UN PKO; (3) internationally coordinated peace and security operations; (4) humanitarian international relief operations; (5) operations to cope with large-scale disasters; (6) protection measures for or transportation of Japanese nationals and others overseas for their evacuation from overseas; (7) communication and coordination or other routine activities; and (8) any other activity in which the provision of supplies and services is permitted under the laws and regulations of the respective countries.

In April, the U.K. Government announced that its Carrier Strike Group led by the U.K. aircraft carrier HMS Queen Elizabeth would visit Japan. Japan welcomed this as it would further promote practical bilateral security and defense cooperation, which has deepened in recent years.

As for major service-to-service exchanges, in July 2020, the Chief of Staff, JS held a video teleconference with General Sir Nick Carter, Chief of the Defence Staff, where they agreed to further strengthen Japan-U.K. defense cooperation and exchanges given the increasingly severe security environment. The Chief of Staff, JS also held a video teleconference with Chief of the Defence Staff Carter in February 2021 in which they affirmed the importance of Japan-U.K. defense cooperation and exchanges, and agreed to strengthen cooperation on common issues for the peace and stability in the international community and the region.

In August 2020, the MSDF conducted counter-piracy joint training in the western waters of the northern Arabian Sea, and confirmed cooperation on counter-piracy. In September, the Chief of Staff, MSDF held a video teleconference with Admiral Antony Radakin, the First Sea Lord and Chief of the Naval Staff, in which they agreed to closely cooperate between the navies of both countries even under the impact of the COVID-19 pandemic. In January 2021, the Chief of Staff, MSDF and the First Sea Lord and Chief of Naval Staff signed a Maritime Security Arrangement to further security cooperation between the MSDF and the British Royal Navy, and agreed to further develop cooperation between the two navies and to hold a video teleconference in March.

Regarding the ASDF, in May 2020, the Chief of Staff, ASDF held a telephone conversation with Air Chief Marshal Sir Michael Wigston, the Chief of the Air Staff, where they reaffirmed the regional situation and the importance of Japan-U.K. cooperation, and shared their determination to further develop cooperation between the two air forces under FOIP.

(2) France

France is a major power that has influence not only in Europe and Africa, but also around the world. Having its overseas territories across the Indian Ocean and the Pacific Ocean, France is the only EU member state that maintains a constant military presence in the Indo-Pacific region. It also historically has had a close relationship with Japan and is positioned as Japan's special partner.

The first Japan-France "2+2" Foreign and Defense Ministerial Meeting was held in Paris in January 2014, followed by the visit of then Minister of the Armed Forces Le Drian to Japan in July of the same year when the Statement of Intent to promote defense cooperation and exchanges was signed. From 2015 to 2018, four "2+2"

meetings were held. At these meetings, Japan and France discussed issues including the following: international terrorism, maritime security, defense equipment and technology cooperation, ACSA, bilateral exercises, cooperation in the space domain, and collaboration in capacity building in developing countries.

Following these meetings, the Agreement concerning the Transfer of Defense Equipment and Technology entered into force in December 2016. In March 2017, the second meeting of the Japan-France Comprehensive Dialogue on Space was held. In the meeting, Japan and France signed the "technical arrangement concerning information sharing regarding the Space Situational Awareness (SSA) between the relevant authority in Japan and the Minister of Defense of the French Republic." In July 2018, the Japan-France ACSA was signed. After the approval by Japan's National Diet in May 2019, the ACSA entered into force in June of the same year.

At the fifth Japan-France "2+2" Meeting and the Defense Ministerial Meeting held in Brest, France, in January 2019, the two countries—both as maritime nations and Pacific nations—decided to establish the Japan-France Comprehensive Maritime Dialogue in order to promote specific cooperative measures, especially to materialize cooperation in the maritime field, for the purpose of upholding and reinforcing FOIP. They also welcomed the commencement of the cooperative research on the Feasibility Study For Mine Countermeasure Technological Activities, and agreed to promote bilateral exercises involving French aircraft carrier "Charles de Gaulle," deployed in the Indian Ocean, and to collaborate in capacity building programs for Southeast Asian countries and the Pacific Island countries. Japan and France also agreed to further strengthen bilateral cooperation in the cybersecurity and space fields through the Japan-France Bilateral Consultations on Cybersecurity and the Japan-France Comprehensive Dialogue on Space.

The 1st Japan-France Comprehensive Maritime Dialogue was held in September in which Japan expressed its appreciation for the dispatch of French ships and aircraft to conduct monitoring and surveillance activities against illicit maritime activities, including ship-to-ship transfers. Both countries agreed to continue to work together closely.

In April 2020, Minister of Defense Kono held a telephone conversation with the Hon. Florence Parly, Minister for the Armed Forces of France. The two ministers agreed to firmly promote defense cooperation and exchanges as partners promoting FOIP, taking into consideration the implications of COVID-19. In November 2020, Defense Minister Kishi received a courtesy call from Admiral Pierre Vandier, Chief of Staff



Chief of Staff, MSDF Yamamura welcoming the French Chief of Staff of the Navy to Japan at the Ministry of Defense (November 2020)

of the French Navy who visited Japan.

In January 2021, Minister of Defense Kishi held a video teleconference with the Hon. Florence Parly, Minister for the Armed Forces of France. Regarding the regional issues including the East China Sea and the South China Sea, the ministers concurred to send a clear message that they strongly oppose any attempts to unilaterally change the status quo by coercion. The two ministers agreed on the cooperation between the defense authorities against the risks imposed by infectious diseases that could affect peace and security, and affirmed they would continue to vigorously promote bilateral defense cooperation and exchanges — including the “2+2” meeting at an earliest possible timing — to uphold and reinforce FOIP.

As for major service-to-service exchanges, the SDF has participated in the HA/DR exercises (“Equateur”) hosted by the French Armed Forces stationed in New Caledonia since 2014.

In July 2020, the Chief of Staff, JS held a video teleconference with General François Lecointre, Chief of the Defence Staff, in which they exchanged views on the state of the COVID-19 pandemic and shared recognition on strengthening cooperation on common issues. In December, the Chief of Staff, GSDF held a video teleconference with General Thierry Burkhard, Chief of Staff of the French Army, in which they agreed to promote defense cooperation and exchanges between the Japanese and French armies.

In September 2018, the naval Chiefs of Staff of the two countries signed the Strategic Orientation agreeing to strengthen bilateral cooperation not only in the Pacific region, but also in the Indian Ocean. In addition, the Chief

of Staff, MSDF held a video teleconference with Admiral Pierre Vandier, Chief of Staff of the French Navy, in October 2020 and a meeting at the Ministry of Defense in November where both sides agreed to cooperate in a range of fields such as bilateral/multilateral training to uphold and reinforce FOIP.

The Destroyer JS “Hyuga” and the supply ship “Hamana” participated in the Japan-France-U.S. multilateral exercise in December 2020 and February 2021. The MSDF is further deepening exchanges between navies. In March, the Destroyer JS “Ariake” participated in a multilateral exercise with France, Belgium and the U.S. to improve tactical skills and strengthen cooperation with the navies of each country. In April, the Destroyer JS “Akebono” participated in the Multilateral Maritime Exercise “La Perouse 21” with France, the United States, Australia and India.

In May, Japan, the United States, Australia and France conducted Multilateral Exercise “ARC21” to further deepen cooperation between the countries that share the vision of FOIP and improve the tactical skills of the SDF relating to island defense.

In November 2020, Japan and France worked together to rescue an emergency patient on an Indian-flagged vessel in the western waters of the northern Arabian Sea.

Furthermore, in June of the same year, the Chief of Staff, ASDF had a telephone conversation with General Philippe Lavigne, Chief of Staff of the French Air and Space Force, in which the two chiefs affirmed their agreement to the Strategic Orientation, and agreed to promote cooperation between the air forces of the two countries.

(3) Germany

Japan has been engaging in exchanges, including high-level ones, with Germany. In July 2017, the Agreement concerning the Transfer of Defense Equipment and Technology went into effect. That month, the Vice Commissioner for International Affairs visited Germany to attend the first Japan-Germany vice-minister strategic dialogue. In addition, in March 2021, Foreign Minister Motegi and Ina Lepel, Ambassador Extraordinary and Plenipotentiary of the Federal Republic of Germany, signed the Agreement on the Security of Information that had been agreed in principal during Chancellor of Germany Angela Merkel’s visit to Japan in February 2019, and affirmed to conduct more beneficial exchanges of information between the governments of both countries.



Video: Japan-France-Belgium-U.S. Multilateral Exercise
URL: <https://youtu.be/UmhLwnEozCQ>

In April 2020, Minister of Defense Kono had a telephone conversation with Kramp-Karrenbauer, German Federal Minister of Defence, in which they agreed to vigorously promote defense cooperation and exchanges based on FOIP, taking into consideration the implications of COVID-19. In November 2020, Minister of Defense Kishi held a video teleconference with German Federal Minister of Defence Kramp-Karrenbauer in which he welcomed and praised the “Policy guidelines for the Indo-Pacific region” released by Germany, and he expressed high expectation for Germany’s commitment in the region. The ministers concurred to sending a clear message about their opposition to any attempts to unilaterally change the status quo by coercion, and agreed to develop a cohesive action against risks imposed by infectious diseases.

The Japan-Germany Defense Ministers’ Forum “Indo-Pacific: Japan and Germany’s Engagement in the Region” was held online in December 2020, in which both ministers delivered a keynote speech and exchanged views on the regional security environment in the Indo-Pacific as well as the bilateral defense cooperation. During the forum, German Federal Minister of Defence Kramp-Karrenbauer noted that Germany was planning the deployment of a navy vessel to the Indo-Pacific region in 2021. Minister of Defense Kishi expressed his firm support of this, and his intention to work closely for the deployment of the German navy vessel.

In February 2021, the Vice-Minister of Defense for International Affairs held a video teleconference with Benedikt Zimmer, State Secretary to the Federal Minister of Defence, to exchange views on defense cooperation and exchanges between the two countries.

In April, the first Japan-Germany Foreign and Defense Ministers’ Meeting (“2+2”) was held in the format of a video teleconference in which the four ministers confirmed their intention to cooperate closely toward the realization of FOIP. Germany explained about the establishment of the “Policy guidelines for the Indo-Pacific region” by the Government of Germany and about the deployment of a German navy frigate to the Indo-Pacific region. Japan welcomed Germany’s growing engagement in the Indo-Pacific region, and raised the possibility of bilateral cooperation on the occasion of the deployment of the German Navy frigate, including bilateral/multilateral exercises as well as monitoring and surveillance activities against illicit ship-to-ship transfers by North Korea-related vessels. The four Ministers shared the view to continue to coordinate with each other on this matter.

The four ministers welcomed the signing and entry into force of the Japan-Germany Agreement on the Security of Information, and shared the view to further promote



Minister of Defense Kishi giving a keynote speech at the online Japan-Germany Defense Ministers Forum (December 2020)

bilateral security cooperation under this agreement, including cooperation in the field of defense equipment. Furthermore, the four ministers shared the serious concerns of the international community about unilateral attempts to change the status quo by coercion, and shared the view that it is important to uphold and reinforce a free and open international order based on the rule of law. They also exchanged views on the situations in the East China Sea and South China Sea. In this context, the Japanese side expressed serious concerns about China’s recent actions including the China Coast Guard Law.

The four ministers exchanged views on North Korea and reaffirmed that the missile launches by North Korea constitute a serious issue for the entire international community, and that it is essential to fully implement the UNSC resolutions for achieving the complete, verifiable, and irreversible dismantlement of all weapons of mass destruction and ballistic missiles of North Korea. They also shared the view that they will continue to collaborate closely toward the early resolution of the abductions issue.

In service-to-service exchanges, the Chief of Staff, GSDF held a telephone conversation with Alfons Mais, Inspector of the Army in October 2020, in which they shared awareness of promoting the further strengthening of relations between the two armies as partners who share common values. In November, the Chief of Staff, MSDF held a video teleconference with Vice Admiral Andreas Krause, Inspector of the Navy, in which they agreed to cooperate in multiple fields toward active involvement in the Indo-Pacific region.

(4) Canada

Between Japan and Canada, high-level exchanges, talks between defense authorities, and other exchanges have been conducted, with the Japan-Canada ACSA signed in April 2018, and entering into force in July 2019 after gaining approval by Japan’s National Diet in May 2019. At the fourth Japan-Canada “2+2” Foreign and



The Destroyer JS "Shimakaze" conducting the Bilateral Exercise with the Royal Canadian Navy frigate HMCS "Winnipeg" during KAEDEX (November 2020)
[Department of National Defence of Canada]



New Zealand patrol aircraft crew observing at a MSDF training facility
(November 2020)

Defense Vice-Ministerial meeting held in December 2018, both sides reaffirmed that they would promote further cooperation. In June 2019, which marked the 90th anniversary of Japan-Canada diplomatic relations in Canada, then Defense Minister Iwaya held the first Japan-Canada Defense Ministerial Meeting in three years with Canadian Minister of National Defence Harjit Singh Sajjan. It was the first official visit to Japan by a Canadian Defence Minister in 13 years. After the meeting, the ministers announced a joint statement that serves as a concrete guideline for the promotion of future defense cooperation. This was the first joint statement to be issued by the defense authorities of Japan and Canada.

In May 2020, Minister of Defense Kono had a telephone conversation with Minister of National Defence Sajjan, in which they exchanged views on issues such as the roles to be played by the defense authorities and initiatives given the global spread of COVID-19. Both ministers expressed the importance of both countries' continued and strengthened bilateral defense cooperation to uphold and reinforce FOIP with the support of Canada's commitment in the region.

In November that year, Minister of Defense Kishi held a telephone conversation with Minister of National Defence Sajjan, in which the two ministers exchanged views on regional security issues including North Korea, the East China Sea, and the South China Sea. During the talk, Minister Kishi expressed that he highly valued Canada's deployment of its assets, even under the impact of COVID-19, for monitoring and surveillance activities against North Korea's illicit ship-to-ship transfers. The ministers concurred to send a clear message that they strongly oppose any attempts to unilaterally change the status quo by coercion.

In addition, the ministers affirmed their cooperation

against the risks imposed by infectious diseases that could affect peace and security. Furthermore, the two ministers welcomed continued collaboration between the two countries such as Japan-Canada Bilateral Exercise "KAEDEX," and affirmed they would continue to vigorously promote bilateral defense cooperation and exchanges to uphold and reinforce FOIP.

In March 2021, Defense Minister Kishi attended the 89th Ottawa Conference on Security and Defence as the first Japanese defense minister to attend, where he gave a keynote speech.¹⁰ In his speech, he reiterated that Japan would advocate internationally in concert with the relevant countries with regard to the China Coast Guard Law, and stressed the importance of cooperation among countries in order to protect universal values, while also introducing the progress of Japan-Canada defense cooperation and exchanges as well as the MOD/SDF efforts to uphold and reinforce FOIP.

As for major service-to-service exchanges, in June that year, the Chief of Staff, JS, held a telephone conversation with General Jonathan Vance, Chief of the Defence Staff, where the two chiefs agreed to strengthen cooperation on common issues for peace and stability in the international community and the region. In November, the Chief of Staff, MSDF held a video teleconference with Admiral Art McDonald, Commander of the Royal Canadian Navy, in which they affirmed close cooperation between the navies of the two countries even under the impact of the COVID-19 pandemic. Later that month, the Destroyer JS "Shimakaze" conducted Japan-Canada Bilateral Exercise "KAEDEX 20" with the Royal Canadian Navy frigate HMCS "Winnipeg" in the sea and airspace west of Kyushu to improve tactical skills and strengthen cooperation. In January 2021, the Chief of Staff, ASDF held a video teleconference with Lieutenant-General

¹⁰ See the MOD website for Minister of Defense Kishi's keynote at the 89th Ottawa Conference on Security and Defence (<https://www.mod.go.jp/en/article/2021/03/8925006d2c156a0a95db0b2b90c756efbb4f2ef3.html#1>)

A.D. Meinzinger, Commander of the Royal Canadian Air Force, in which they agreed to further strengthen defense cooperation and exchanges between the two air forces to uphold and reinforce FOIP.

(5) New Zealand

In relation to New Zealand, a memorandum on defense cooperation and exchanges was signed in August 2013. During a summit meeting in July 2014, the two countries agreed to conduct studies on an ACSA. In addition, at the summit meeting in September 2019, the two leaders shared the view that two countries will commence a joint study toward negotiations for an agreement on security information sharing.

In May 2020, Minister of Defense Kono had a video teleconference with the Hon. Ron Mark, Minister of Defence, in which they exchanged views on regional security issues including North Korea, the East China Sea and the South China Sea, and on bilateral defense cooperation and exchanges. The ministers welcomed that the bilateral cooperation regarding Pacific Island countries has been making progress, such as through the participation in the Multinational HA/DR Exercise “Christmas Drop” in December 2019, and shared a view to further widen cooperation in the region, and continue to proactively promote bilateral cooperation and exchanges including further cooperation on measures to combat infectious diseases.

In September and December 2020, the Vice-Minister of Defense for International Affairs held a telephone conversation with Secretary of Defence Andrew Bridgman in which they exchanged views on bilateral defense cooperation and exchanges, and affirmed to further deepen the relationship between the two countries.

As for monitoring and surveillance activities against North Korea’s ship-to-ship transfers, the New Zealand Defence Force has continued its commitment by deploying patrol aircraft in 2018, 2019, and in 2020 despite the impact of the COVID-19 pandemic. In November 2020, the crew of a deployed patrol aircraft visited the MSDF Kanoya Air Base and held an exchange with the MSDF personnel who operated patrol aircraft.

(6) North Atlantic Treaty Organization (NATO)

When Prime Minister Abe visited Europe in May 2014, he held a meeting with then NATO Secretary General Rasmussen at NATO Headquarters and signed the Individual Partnership and Cooperation Programme between Japan and NATO (IPCP)¹¹ (revised in May 2018 and June 2020). Based on the IPCP, SDF personnel were

dispatched to NATO Headquarters for the first time in December 2014 as part of the Japan-NATO cooperation in the field of women, peace and security. Furthermore, the MOD/SDF has participated in the annual meeting of the NATO Committee on Gender Perspectives (NCGP) since 2015.

In addition, from December 2019, SDF personnel have been assigned to the NATO Headquarters Consultation, Command and Control Staff (NHQC3S) as staff responsible for managing information and communications for various NATO policies and projects.

The MOD also sent a liaison officer to the Supreme Headquarters Allied Powers Europe (SHAPE) in February 2017 and a liaison officer to the NATO Maritime Command (MARCOM) in June 2019. In July 2018, the Mission of Japan to the North Atlantic Treaty Organisation was established as an additional role of the Embassy of Japan in Belgium. In the cyber field, since March 2019, an MOD official has been being dispatched to the NATO Cooperative Cyber Defence Centre of Excellence (CCDCOE). In December 2019, Japan officially participated for the first time in the NATO cyber defense exercise “Cyber Coalition 2019” in Estonia. In April 2021, Japan officially participated for the first time in the cyber defense exercise “Locked Shields 2021” organized by the CCDCOE.

In July 2020, Minister of Defense Kono had a telephone conversation with H.E. Jens Stoltenberg, NATO Secretary General. They exchanged views on regional security issues, including the East China Sea and the South China Sea. They shared the view that they strongly oppose unilateral attempts to change the status quo by coercion, and they agreed to vigorously promote defense cooperation and exchanges to uphold and reinforce FOIP by taking into consideration the implications of the COVID-19 pandemic and the revised IPCP.

In service-to-service exchanges, in April and November 2020, and April 2021, the Chief of Staff, JS held a telephone conversation with Air Chief Marshal Sir Stuart Peach, Chairman of the Military Committee, in which the two chiefs reaffirmed the importance of defense cooperation and exchanges between Japan and NATO.

(7) Other European Countries

With Italy, Japan and Italy have been promoting institutional development for facilitating defense cooperation and exchanges, including the entry into force of the Japan-Italy Information Security Agreement in June 2016 and the Agreement concerning the Transfer of the Defence Equipment and Technology in April 2019,

¹¹ The IPCP stipulates the promotion of cooperation, such as enhancing high-level dialogue and promoting defense cooperation and exchanges, with the aim of further developing cooperation between Japan and NATO, and specifies priority areas for working level cooperation. The IPCP was revised again in June 2020, adding “human security” as a priority area for working level cooperation.

as well as the signing of the Memorandum on defense cooperation and exchanges in May 2017.

In May 2020, Minister of Defense Kono had a telephone conversation with Italian Minister of Defence Lorenzo Guerini. The ministers agreed they strongly oppose any attempts to unilaterally change the status quo by coercion. Moreover, the year of 2020 marked the 100th anniversary of the first over-flight from Rome to Tokyo, and both ministers welcomed the advancement of cooperation made between the two Air Forces and also agreed to vigorously promote defense cooperation and exchanges to uphold and reinforce FOIP. They also expressed their intention to further expand cooperation in the future, including in the field of defense equipment and technology cooperation.

The Chief of Staff, ASDF held a telephone conversation in August, and a video teleconference in October, with Generale di squadra Alberto Rosso, Chief of Staff of the Italian Air Force, in which the two chiefs agreed to further strengthen relations between the two air forces.

With Spain, Spanish Defense Minister De Cospedal visited Japan in January 2018 for a Japan-Spain defense ministerial meeting, where the Japanese and Spanish ministers agreed to further enhance the relationship between the two countries' defense authorities based on the memorandum on defense cooperation and exchanges signed in November 2014.

In February 2021, the Destroyer JS "Yugiri" conducted goodwill training with a Spanish Navy training ship in the waters around Guam.

With the Netherlands, then Netherlands Minister of Defence Hennis-Plasschaert visited Japan in December 2016 for a Japan-Netherlands defense ministerial meeting, where the two ministers signed a memorandum regarding defense cooperation and exchanges. In September 2018, then Minister of Defense Onodera visited the Netherlands for the Japan-Netherlands Defense Ministerial Meeting with the Minister of Defense Ank Bijleveld. While the two ministers exchanged opinions on cooperation under the frameworks of the NATO and the European Union (EU), then Minister of Defense Onodera explained the situation of the illicit ship-to-ship transfers by North Korea and stressed the importance of implementing strict sanctions on these illicit practices under the UN Security Council Resolutions. It was agreed that the Netherlands would work closely with Japan regarding this matter, as a non-permanent member of the UN Security Council

and the then chair of the UN Security Council Sanctions Committee on North Korea.

In addition, a Dutch navy frigate joining the U.K. Carrier Strike Group will also visit Japan in 2021. Japan has announced it will welcome the visit as a further development of the historic Japan-Dutch relations.

With Estonia, in September 2018, Estonian Minister of Defence Jüri Luik visited Japan for the bilateral Defense Ministerial Meeting. Based on what was discussed during Prime Minister Abe's visit to Estonia in January 2018, Japan and Estonia agreed to deepen cooperation in the cybersecurity field through bilateral and multilateral frameworks, which includes the dispatch of Japanese MOD officials to the NATO CCDCOE.

With Ukraine, Ukrainian Deputy Minister of Defence Anatolii Petrenko visited Japan in October 2018. During this visit, a memorandum on defense cooperation and exchanges was signed and the Japan-Ukraine Security Meeting was held.

In March 2021, Minister of Defense Kishi held a defense ministers' video teleconference with H.E. Mr. Andrii Taran, Minister of Defence of Ukraine, who visited Japan for the first time. Minister Kishi expressed that Japan respects the sovereignty and territorial integrity of Ukraine. Both ministers affirmed the importance of defense cooperation and exchanges, and confirmed to promote a wide range of the cooperation based on the memorandum between the two ministries. They also exchanged views on regional issues, especially regarding the East China Sea and the South China Sea, they confirmed to strongly oppose any attempts to unilaterally change the status quo by coercion. In this context, they shared the view on the deep concerns over the Chinese Coast Guard Law.

With Finland, in February 2019, then Finnish Minister of Defence Jussi Niinistö visited Japan to sign a memorandum on defense cooperation and exchanges between the two countries. In August 2020, Minister of Defense Kono held a video teleconference with Minister of Defence Kaikkonen, in which they expressed to vigorously promote defense cooperation and exchanges to uphold and reinforce FOIP, taking into consideration the implications of COVID-19.

With Denmark, Defense Minister Kono held a telephone conversation with Defense Minister Bramsen in October 2019, where they exchanged views on bilateral defense exchanges and the security situation surrounding both



Video: Japan-EU joint exercise
URL: <https://youtu.be/45BYnavN2yU>



The captain of JS "Onami" saluting the Spanish frigate "Santa Maria" during a Japan-EU joint exercise (October 2020)



Personnel from the EU and Japan donating stationery and other items to elementary and junior high schools in Djibouti (October 2020)

countries. In addition, Defense Minister Kono explained the SDF's information gathering activities to ensure the safety of Japan-related vessels in the Middle East.

With the EU, in February 2020, at the 56th Munich Security Conference, Minister of Defense Kono held talks with EU High Representative Borrell, where they welcomed that cooperation is advancing especially in the field of maritime security, and shared the view that they would continue to promote concrete defense cooperation and exchanges. They exchanged views on issues such as security situations in the Indo-Pacific region.

In addition, at the Japan-EU summit meeting held in May 2021, both sides agreed to enhance cooperation for a "Free and Open Indo-Pacific." They exchanged views on the situation in the East and South China Seas, and shared the view to strongly oppose unilateral attempts to change the status quo. They also underscored the importance of peace and stability across the Taiwan Strait, and concurred to encourage the peaceful resolution of cross-strait issues.

As for major service-to-service exchanges with the EU, in June 2020, the Chief of Staff, JS held a telephone conversation with General Claudio Graziano, Chairman of the European Union Military Committee, where they exchanged views on current security affairs and efforts to combat the COVID-19 pandemic. In addition, in October, the Destroyer JS "Onami" engaged in counter-piracy operations, conducted joint counter-piracy training with the European Maritime Force (Operation Somalia Atlanta), and a joint visit to the port of Djibouti. In conjunction with the joint visit, both the EU and Japan are deepening exchanges in a wide range of fields, such as holding a ceremony to donate stationery to elementary and junior high schools in Djibouti, as well as holding a high-level video teleconference.

At these events, Minister of Defense Kishi and EU High Representative Borrell issued a joint press release with their comments. Minister of Defense Kishi remarked

that Japan and EU coordination for counter-piracy is extremely important and that Japan will continue to cooperate with the EU to uphold and reinforce FOIP.

6 China

(1) Significance of Defense Cooperation and Exchanges with China

A stable relation between Japan and China is an essential factor for the peace and stability of the Indo-Pacific region. From broad and medium- to long-term perspectives, it is necessary for both countries to strive to build and enhance the "Mutually Beneficial Relationship Based on Common Strategic Interests with China" in all areas, including security.

In the security field, in order to enhance mutual understanding and trust, the MOD/SDF will promote multilayered dialogues and exchanges with China. In doing so, Japan conveys its candid concerns about the situation in the East China Sea, including the waters around the Senkaku Islands, and continues to encourage China to play a responsible and constructive role for peace and stability in the Indo-Pacific region, comply with international norms of conduct, and improve transparency regarding defense policy and military capability, so as to strongly urge China to dispel concerns of the international community, including Japan. Moreover, in order to avoid unexpected situations, Japan will utilize the Maritime and Aerial Communication Mechanism between the Defense Authorities of Japan and China in a manner that contributes to building a trusting relationship between the two countries.

(2) Recent Major Achievements in Defense Exchanges

Japan-China defense exchanges stagnated following the Japanese Government's acquisition of ownership of the three Senkaku Islands (Uotsurijima Island, Kitakojima Island, and Minamikojima Island) in September 2012,



Minister of Defense Kishi holding a video teleconference with the Chinese State Councilor and Minister of National Defense (December 2020)

but have gradually resumed since the latter half of 2014.

In November 2015, the Japan-China Defense Ministerial Meeting was held for the first time in four years and five months on the margins of the ADMM-Plus meeting between then Japanese Defense Minister Nakatani and then Chinese State Councilor and Defense Minister Chang Wanquan. In addition, in June 2019, then Defense Minister Iwaya and State Councilor and Defense Minister Wei Fenghe held a meeting where both ministers shared the recognition of the importance to realize the mutual visits between the Japanese Defense Minister and the Chinese Defense Minister as soon as possible. Based on this shared understanding, in December 2019, Defense Minister Kono visited China for the first time in 10 years as defense minister.

In December 2020, Minister of Defense Kishi held a video teleconference with State Councilor and Defense Minister Wei Fenghe. During the meeting, Minister Kishi conveyed Japan's strong concerns about the attempts to unilaterally change the status quo by coercion in light of the situation in the East China Sea, including the waters around the Senkaku Islands, which are an inherent part of the territory of Japan, and strongly urged China to refrain from action that could escalate tensions. Regarding the situation in the South China Sea, Minister Kishi conveyed Japan's concerns over the current situation, and pointed out the importance of the rule of law and self-restraint.

Furthermore, Minister Kishi urged China to dispel the international community's concern by improving transparency over China's defense policy and its military power. The two ministers confirmed to continue communications between defense authorities and concurred to further accelerate coordination toward a hotline between Japanese and Chinese defense authorities.

In March 2015, the 13th Japan-China Security Dialogue took place in Tokyo, with the two countries' diplomatic and defense authorities participating. It was the first such meeting in four years. This Dialogue has

been held almost every year since then. In addition, the Japanese and Chinese defense authorities have also participated in the Japan-China High-Level Consultation on Maritime Affairs. The 12th consultation was recently held in February 2021. Japan reiterated its position and concerns regarding issues in the fields of maritime security, including the East China Sea, and urged China to take action, and conveyed Japan's strong concerns about the China Coast Guard Law.

As for service-to-service exchanges, in April 2019, Destroyer JS "Suzutsuki" visited China, as the first MSDF ship to do so in about seven and a half years, and participated in the International Fleet Review held by China to commemorate the 70th anniversary of the founding of the Chinese People's Liberation Army Navy. In the same month, the Chief of Staff, MSDF, who visited China for the first time in about five and a half years, attended a high-level symposium held on the sideline of the Fleet Review. On this occasion, the Chief of Staff, MSDF, conveyed the importance of free and open seas. Following this, in October 2019, the Chinese navy guided-missile destroyer "Taiyuan" became the first Chinese naval vessel to visit Japan in about 10 years, and conducted the third goodwill exercise with an SDF destroyer, which was the first time in about eight years.

As for unit-to-unit exchanges, a delegation from the Eastern Theater Command, headed by the deputy commander, visited Japan in November 2018, followed by a delegation from the SDF, led by the Western Army commanding General, visiting the Eastern Theater Command and other areas in November 2019. In 2018, the Japan-China field-grade officer exchange program hosted by Japan's Sasakawa Peace Foundation was held for the first time in six years. In April 2018 and September 2019, the Chinese delegation consisting of field-grade officers of the People's Liberation Army visited Japan, and in addition, the Japanese delegation consisting of field-grade officers of the SDF visited China in September 2018 and April 2019. The Japanese delegate paid courtesy calls to important persons and visited military units, etc.

The MOD/SDF will continue to communicate with China in order to clearly convey Japan's candid concerns, taking into consideration the current situation of various concerns, while promoting defense exchanges and fostering mutual understanding and trust between the Japanese and Chinese defense authorities, and will respond calmly and resolutely in order to firmly protect Japan's territory, territorial waters, and airspace.

(3) Maritime and Aerial Communication Mechanism between the Defense Authorities of Japan and China

At Japan-China summit meetings in January and April 2007, then Japanese Prime Minister Abe and Chinese

Premier Wen Jiabao agreed to develop a mechanism for communications, particularly maritime communications, between the two countries' defense authorities. Based on the agreement, their defense authorities held the first Joint Working Group Meeting on the mechanism in April 2008 and accumulated talks. From the fourth Joint Working Group Meeting in January 2015, diplomatic authorities of both countries joined the negotiations.

After the eighth meeting of the Japan-China High-Level Consultation on Maritime Affairs in December 2017 and the seventh Joint Working Group Meeting in April 2018, Japanese and Chinese defense authorities signed the memorandum on the mechanism¹² in the presence of then Japanese Prime Minister Abe and Chinese Premier Li Keqiang on the occasion of the Japan-China summit meeting in Tokyo in May 2018, and the operation of this mechanism commenced on June 8, 2018.

The "Maritime and Aerial Communication Mechanism between the Defense Authorities of Japan and China" has been developed (1) to promote mutual understanding and confidence between Japan and China and to enhance bilateral defense cooperation and exchange; (2) to avoid unexpected collisions; and (3) to prevent unforeseen circumstances in the sea and air from developing into military clashes or political or diplomatic issues. The mechanism's main components include (1) annual and expert meetings between the two countries' defense authorities; (2) a hotline between Japanese and Chinese defense authorities; and (3) on scene communication measures between vessels and aircraft of the SDF and the People's Liberation Army.

Under the mechanism, the first annual and expert meetings were held between the defense authorities in December 2018, the second in January 2020. The third annual and expert meetings were held in March 2021, Japan conveyed its position on the situation in the East China Sea, including the sea and airspace around the Senkaku Islands, expressed strong concerns about any attempts to unilaterally change the status quo by coercion and stated its strong opposition to any activities that escalate tension.

In addition to delivering strong concern about the China Coast Guard Law, Japan conveyed that it is absolutely unacceptable that the enactment of the law would undermine the legitimate interests of the countries concerned, including Japan, and increase tensions in waters such as the East China Sea and the South China Sea. On that basis, Japan shared the recognition that this mechanism has been operated properly since its inception, and affirmed the steady progress in coordinating the early

establishment of a hotline between Japanese and Chinese defense authorities.

At the Japan-China Defense Ministers' video teleconference held in December 2020, Japan once again welcomed the steady progress in coordinating the early establishment of the hotline, and both Japan and China's defense ministers concurred to further accelerate the coordination for the establishment by exercising both Ministers' leadership.



Reference 36 (Recent Defense Cooperation and Exchanges with China [Past Three Years])

7 Russia

(1) Significance of Defense Cooperation and Exchange with Russia

Given that Russia is a key security player in the Indo-Pacific region and an important country neighboring Japan, it is very important for Japan to promote confidential relations with Russia through bilateral defense exchanges. As Japan-Russia relations have continuously been developing in a wide range of areas, the MOD/SDF has continuously conducted Japan-Russia "2+2" Meetings and various dialogues with Russian defense authorities according to the Memorandum on Japan-Russia Defense Exchanges signed in 1999 (revised in 2006), annual meetings based on the Japan-Russia Agreement on Prevention of Incidents on and over the High Seas,¹³ and bilateral search and rescue exercises.

The Government of Japan deals with the relationships with Russia appropriately while emphasizing the solidarity of the G7 (Group of Seven), taking the Ukrainian situation and other factors into account. At the same time, it is important to maintain constant contacts with Russia, as one of Japan's neighbors, at the working level to avoid unforeseen circumstances or unnecessary conflicts. The MOD considers these points in a comprehensive manner and advances defense exchanges with Russia accordingly.

(2) Recent Major Achievements in Defense Exchanges

At the Japan-Russia summit meeting in April 2013, the two leaders affirmed the importance of expanding cooperation between Japan and Russia in the field of security and defense and agreed to set up the Japan-Russia "2+2" Meeting, where the two countries' defense and foreign ministers would participate. At the first Japan-Russia "2+2" Meeting in November 2013, the two countries agreed to conduct service-to-service unit exchanges between army branches and the mutual

¹² Official title: Memorandum on the Maritime and Aerial Communication Mechanism between the Japanese Ministry of Defense and the Chinese Ministry of National Defense

¹³ Official title: Japan-Russia Agreement on the prevention of incidents at sea beyond territorial waters and the air space above them



Parliamentary Vice-Minister for Defense Matsukawa giving a speech at the preparatory meeting (video teleconference) for the Japan-Pacific Islands Defense Dialogue (March 2021).



PNG Defence Force members participating in online training for engineering equipment maintenance (March 2021)

dispatch of exercise observers on a regular basis, and bilateral exercises of counter-piracy units of the MSDF and Russian Navy in the Gulf of Aden, as well as the regular Japan-Russia Cybersecurity Meeting.

At the second Japan-Russia “2+2” Meeting in March 2017, the two countries exchanged opinions regarding the regional situations among other topics. Concerning the activities of the Russian Armed Forces, the Japanese side protested against enhancing armaments, including the deployment of surface-to-ship missiles on the Northern Territories and the deployment of divisions on islands that may contain the Four Northern Islands. Japan expressed regret that these activities conflicted with Japan’s stance that the Northern Territory is an inherent part of the territory of Japan.

In July 2018, then Minister of Defense Onodera became the first Japanese Minister of Defense to pay a visit to Russia. He joined the Japan-Russia “2+2” Meeting and the Defense Ministerial Meeting. In these meetings, Japan and Russia agreed on promoting bilateral defense exchanges, including a visit by the Chief of Staff, JS to Russia and mutual visits of naval ships, as well as on cooperation towards the denuclearization of North Korea, which has been a shared goal for the two countries.

In May 2019, the Japan-Russia Defense Ministerial Meeting and the fourth Japan-Russia “2+2” Meeting were held in Tokyo. Regarding defense exchange, the Ministers agreed on the first participation by the GSDF Central Band in an international military music festival in Russia held in the summer of 2019. Regarding defense policy, the Japanese side explained that Japan’s missile defense system is a purely defensive one and does not pose a threat to Russia.

 See Reference 37 (Recent Defense Cooperation and Exchanges with Russia [Past Three Years])

8 Pacific Island Countries

Pacific Island countries are important countries that share the importance of a free, open, and sustainable maritime order based on the rule of law as maritime nations, as well as bear strong historical relationships with Japan. At the eighth Pacific Alliance Leaders Meeting (PALM8) held in 2018, Japan expressed its intention to strengthen its commitment to the stability and prosperity of the region. In addition, the NDPG published in the same year referred for the first time to Japan’s intention to promote cooperation and exchanges with Pacific Island countries.

In June and August 2020, Minister of Defense Kono held telephone conversations with the defense ministers of Fiji, Papua New Guinea (PNG), and Tonga, three Pacific island nations that have armed forces. At each meeting, the ministers exchanged views taking into consideration the implications of COVID-19, and agreed to continue communication between defense authorities, and to continue to strongly promote defense cooperation and exchanges between their respective countries toward upholding and reinforcing FOIP.

In March 2021, a director-general level video teleconference was held as a preparatory meeting for the Japan Pacific Islands Defense Dialogue (JPIDD)¹⁴ with Fiji, Papua New Guinea, and Tonga. At the meeting, the directors-general, taking into consideration the current global spread of COVID-19, exchanged views on the roles of defense authorities in the fields of infectious disease control, HA/DR and climate change, and maritime security. Moreover, they confirmed they would continue

¹⁴ The Ministry of Defense is planning to hold the JPIDD in Tokyo with the defense ministers of PNG, Fiji, and Tonga, and senior government officials (Director General level) from other Pacific Island countries that do not possess a military, as well as the United States, Australia, New Zealand, the United Kingdom, France and Canada, to discuss various regional issues, promote mutual understanding, and build confidence. The JPIDD was initially planned to be held in April 2020, but has been postponed by the COVID-19 pandemic, and will be held at an appropriate time taking into consideration the implications of COVID-19.

to cooperate closely toward the holding of the JPIDD.

With PNG, since 2015, the GSDF Central Band has cooperated and strengthened the bilateral relationship with PNG with regard to establishing and training a military band through a capacity building program. Through the capacity building, the band gave an excellent performance on the occasion of the Asia-Pacific Economic Cooperation (APEC) in PNG in front of the national leaders in November 2018. In addition, in March 2021, the MOD and SDF provided an online course about engineering equipment maintenance for an engineer unit to improve HA/DR capacity as a capacity building program for PNG.

In addition to these efforts, the MSDF and ASDF have strengthened Japan's relationships with Pacific Island countries by calling at ports and airports. Since 2015, the ASDF has conducted the Multilateral Humanitarian Assistance and Disaster Relief Exercise "Christmas Drop" in the Federated States of Micronesia. In the airdrop exercises, the ASDF has also dropped various donations to the Federated States of Micronesia, the Republic of Palau, and the Northern Mariana Islands.

 **See** Reference 38 (Recent Defense Cooperation and Exchanges with Pacific Island Countries [Past Three Years])

9 Middle Eastern Countries

Since peace and stability in the Middle East are extremely important for the peace and prosperity of the international community, including Japan, the MOD/SDF has been promoting high-level exchanges and unit-to-unit exchanges in order to build and strengthen cooperative relationships with countries in the region.

With the United Arab Emirates (UAE), Japan and the UAE signed a memorandum on defense exchanges in May 2018, and held a meeting between defense authorities in December 2018. In January 2020, Prime Minister Abe visited the UAE and met Crown Prince of Abu Dhabi Mohammed to exchange views and explain Japan's efforts to ensure the safety of navigation of Japan-related vessels in the Middle East, gaining his support for such efforts. In March and June, Minister of Defense Kono held a telephone conversation with Minister Bowardi of the UAE, while Minister of Defense Kishi held a video teleconference with Minister Bowardi in March 2021, in which they exchanged views on bilateral defense exchanges and regional security issues on each occasion.

As for service-to-service exchanges, the Chief of Staff, JS visited the UAE for the first time in June 2019 and paid a courtesy call to H.H. Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi. The SDF participated in the Dubai Air Show in November with a C-2 transport aircraft. In July 2020 and March 2021,



Chief of Staff, JS Yamazaki holding a video teleconference with the Chief of Staff of the UAE Defence Force (July 2020)

the Chief of Staff, ASDF held a video teleconference with Lieutenant General Hamad Mohammed Thani Al Rumaithi, Chief of Staff, in which they agreed to continue working together to address common issues for the peace and stability of the international community and the region. Bilateral defense exchanges have continued to deepen, with the Chief of Staff, ASDF holding a telephone conversation with Major General Staff Pilot Ibrahim Naser M. Al-Alawi, Commander of the Air Force, in March 2021.

With Israel, Japan and Israel held the first politico-military dialogue in October 2018. In the first meeting, the leaders exchanged opinions on a wide range of topics, from regional situations to security issues. In November 2018, the fourth Dialogue on Cyber Issues between Japan and Israel was held. In September 2019, the defense authorities signed the Memorandum on Protection of Information for the Exchange of Classified Information on Defense Equipment and Technology between the Ministry of Defense of Japan and the Ministry of Defense of the State of Israel. Through these efforts, Japan and Israel have strengthened their relationship in the security field.

In June, the Chief of Staff, JS visited Israel for the first time as the Chief of Staff of Japan, and in June 2020, held a telephone conversation with Lieutenant General Rav Aluf Aviv Kochavi, the Chief of the General Staff, in which they promoted exchanges between services.

With Iran, at the Japan-Iran summit meeting in December 2019, Prime Minister Abe gave a detailed explanation of Japan's efforts to ensure the safety of the navigation of Japan-related vessels in the Middle East. In addition, in October 2019 and January 2020, Defense Minister Kono held the first defense ministerial telephone conversation with Defense and Logistics Minister Hatami, in which the two ministers exchanged views on the regional situation and other issues. In February 2021, Minister of Defense Kishi held a video teleconference with Defense and Logistics Minister Hatami in which Minister Kishi explained the extension of the information

gathering activities for ensuring the safe navigation of Japan-related vessels in the Middle East, and the two ministers concurred on continuing communication between the defense authorities of the two countries.

With Egypt, State Minister of Defense Yamamoto visited Egypt in September 2017, marking the first visit by one of the political officers of the MOD. Moreover, in June 2020, the Chief of Staff, JS held a telephone conversation with Lieutenant General Mahmoud Ibrahim Mahmoud Hegazy, Chief of Staff of the Egyptian Armed Forces, in which they affirmed the importance of promoting defense cooperation between the two countries.

With Oman, in March 2019, Minister Responsible for Defense Affairs Sayyid Badr visited Japan and met then Minister of Defense Iwaya and signed a memorandum on defense exchanges. In December 2019, Defense Minister Kono visited Oman for the first time as a defense minister and met with Minister Responsible for Defense Affairs Badr. Both ministers confirmed to continue deepening defense cooperation and exchanges such as cooperation between the naval services under the FOIP vision. In January 2020, Prime Minister Abe visited Oman to exchange views with the new King Haitham and directly briefed him on Japan's efforts to ensure the safety of navigation of Japan-related vessels in the Middle East, gaining his support for such efforts.

With Qatar, Japan and Qatar signed a memorandum on defense exchanges in February 2015. In May 2019, Qatari Deputy Prime Minister and Minister of Defense Attiyah visited Japan and the first defense ministers meeting was held between Minister Attiyah and then Defense Minister Iwaya. In December 2019, Defense Minister Kono attended the 19th Doha Forum hosted by Qatar for the first time as a defense minister and met with Deputy Prime Minister and Minister of State for Defense Affairs Attiyah. At the meeting, both Ministers welcomed that Japan-Qatar defense cooperation and exchanges are moving forward, and confirmed to continue deepening defense cooperation and exchanges in areas such as education and training.

With Saudi Arabia, Japan signed a memorandum on defense exchanges with Saudi Arabia in September 2016. In January 2020, Prime Minister Abe visited Saudi Arabia and paid a courtesy call to King Salman and Crown Prince Mohammed. In September, Minister of Defense Kono held telephone conversations with Crown Prince and Minister of Defense Mohammed. The two parties exchanged views on bilateral defense cooperation and exchanges, and current regional security issues. Defense Minister Kono also explained the SDF's information gathering activities to ensure the safety of Japan-related vessels in the Middle East.

In February 2021, Minister of Defense Kishi held a

telephone conversation with H.R.H. Prince Khalid bin Salman, Deputy Minister of Defense, in which the two ministers concurred to promote defense cooperation and exchanges in the context of preventing the spread of infectious diseases, in light of the impact of the COVID-19 pandemic. They agreed to continue close communication for ensuring peace, stability and safe navigation of vessels in the Middle East.

With Turkey, Japan's then Administrative Vice-Minister of Defense signed a Statement of Intent to promote defense cooperation and exchanges with Turkey's then Undersecretary of the Ministry of National Defense Ümit Dündar in July 2012 during their talk. In June 2019, Commander of the Turkish Land Forces General Ümit Dündar visited Japan, held a meeting with the Chief of Staff, GSDF, and paid a courtesy call to the State-Minister of Defense of Japan. In July 2019, Defense Minister Akar accompanied the president to Japan for the G20 and held talks with then Minister of Defense Iwaya.

With Bahrain, Defense Minister Kono held a telephone conversation with the Commander in Chief of Bahrain Defense Force Khalifa to exchange views on bilateral defense exchange and the situation in the Middle East. In November 2019, Defense Minister Kono met with Commander Khalifa on the occasion of the 15th Manama Dialogue held in Bahrain. This was the first ministerial-level meeting between the defense authorities of the two countries. At the meeting, both sides agreed to continue high-level exchanges as well as exchanges of mainly naval services. Furthermore, in August 2020, the Chief of Staff, JS held a video teleconference with Lieutenant General Theyab bin Saqer Al Noaimi, Chief of Staff, in which they exchanged views on defense exchanges between the two countries and efforts to prevent the spread of COVID-19.

Between Japan and Jordan, a memorandum on defense cooperation and exchanges was signed when Jordanian King Abdullah II visited Japan in October 2016. In November 2018, the King visited Japan and welcomed the steady progress concerning the defense authorities' meetings and unit-to-unit exchanges during then Minister of Defense Iwaya's courtesy visit to him and during his visit to the GSDF units of Camp Narashino.

In addition, Defense Minister Kono, who visited Jordan for the first time as defense minister in December 2019, met with Lieutenant General Yousef Huneiti, Chairman of the Joint Chiefs of Staff. During the meeting, Lt Gen Huneiti stated that bilateral defense exchanges are making progress such as the first politico-military dialogue being held for the first time in July 2019, and also stated that he would like to continue advancing cooperation in areas such as training and equipment. In response, Minister Kono stated that he would like to consider cooperation in

the fields raised by Lt Gen Huneiti.

Furthermore, in October 2020, the Second Joint Foreign Affairs and Security Consultations was held as a video teleconference.

 **See** Reference 39 (Recent Defense Cooperation and Exchanges with Middle Eastern Countries [Past Three Years])

10 Asian Countries

(1) Sri Lanka

Sri Lanka is an important country located at a key point on the sea lanes in the Indian Ocean. In recent years, Japan has strengthened bilateral defense cooperation and exchanges with Sri Lanka. In August 2018, then Defense Minister Onodera made the first visit to Sri Lanka as a Defense Minister. During this visit, the first-ever Defense Ministerial Meeting between the two countries was also held between then Defense Minister Onodera and then Sri Lankan State Minister of Defence Ruwan Wijewardene, in which they exchanged their opinions on maritime security and safety. The Sri Lankan State Minister of Defence also expressed the country's hope to improve the capabilities of the Sri Lanka Armed Forces as a whole through capacity building of the three military services in the HA/DR field, for which then Defense Minister Onodera expressed his support.

In July 2019, then State Minister of Defense Harada visited Sri Lanka for a meeting with then State Minister of Defence Wijewardene and paid a courtesy call on then President and Minister of Defence Sirisena to share their views on the need to further strengthen the partnership between the maritime states of Sri Lanka and Japan to promote FOIP.

As for major service-to-service exchanges, the naval forces of the two countries agreed to hold the first staff consultations in February 2019, and to conduct the bilateral HA/DR exercise “JA-LAN” on an annual basis. In September 2020, the Indo-Pacific Deployment Squadron conducted the Bilateral Exercise (JA-LAN EX) in the sea and airspace around Colombo Harbor to improve tactical skills and strengthen cooperation with the Sri Lanka Navy.

As for capacity building, in February 2020, an air rescue seminar was held at the Sri Lanka Air Force Command for about 15 members of the Sri Lanka Air Force. The seminar introduced the knowledge and capabilities of the ASDF's air rescue, and discussed the creation of a search and rescue manual for the Sri Lanka Air Force.



The Destroyer JS “Suzunami” participating in the Multilateral Exercise “AMAN 21” hosted by the Pakistan Navy (February 2021) [Pakistan Navy]

(2) Pakistan

Located at the junction of South Asia, the Middle East, and Central Asia, Pakistan is an important state for stability in the Indo-Pacific region, and it faces an important sea lane for Japan. Pakistan is a pro-Japanese country that has traditionally had a friendly relationship with Japan. Building on this relationship, the two countries have promoted defense cooperation and exchanges.

Since 2004, Japan and Pakistan have conducted Director-General level dialogues on defense policy on a biennial basis. However, in June 2019, the two countries held Military-to-Military Talks for the second year in a row, in which they signed the Memorandum on Japan-Pakistan Defense Cooperation and Exchange. In August 2020, Minister of Defense Kono had a video teleconference with Chief of Army Staff General Bajwa where the two ministers exchanged views on bilateral defense cooperation and exchanges, taking into consideration the implication of COVID-19.

As for service-to-service exchanges, the MSDF participated in “AMAN,” the Multinational Exercise hosted by the Pakistan Navy, while also conducting educational exchanges.

(3) Mongolia

Mongolia is an important partner that shares universal values with Japan, and the MOD/SDF is promoting defense cooperation and exchanges with Japan toward developing a “strategic partnership.”

In June 2020, Minister of Defense Kono held a video teleconference with Minister of Defense Enkhbold to exchange views on regional security issues, including



Video: The Indo-Pacific Deployment 2020

URL: <https://www.youtube.com/watch?v=akdBvIOFaL8>

the East China Sea and South China Sea. By taking into consideration the implications of COVID-19, the two ministers agreed to vigorously promote bilateral defense cooperation and exchanges to uphold and reinforce FOIP.

In addition, the SDF has been conducting projects in the fields of PKO (engineering) and military medicine since 2012 in support of capacity building.

See Reference 40 (Recent Defense Cooperation and Exchanges with Asian Countries [Past Three Years])

11 African Countries

Djibouti is an important country in terms of being the only country where the SDF has an overseas facility that is used to counter-piracy. The installation was used for transporting goods to the unit dispatched to the UNMISS. From October to December 2019, the installation was used as an accommodation for SDF instructors that attended a training program for Djibouti's military engineers on the operation of heavy machinery, which was conducted as part of Japan's disaster response capacity building for Djibouti. In December 2019, Defense Minister Kono visited Djibouti and held a meeting with Defense Minister Burhan. At the meeting, the two ministers confirmed that they would continue to strengthen cooperation between the defense authorities in order to deepen bilateral defense cooperation and exchanges.

Minister Kono also expressed his appreciation for the government's support for the operation of the SDF's installation in Djibouti, and explained the use of fixed-wing patrol aircraft of the SDF's counter-piracy unit based in Djibouti for information gathering activities to ensure the safety of Japanese vessels in the Middle East.

Japan will work on the stable, long-term use of this facility for security cooperation in the Middle East and Africa.

See Reference 41 (Recent Defense Cooperation and Exchanges with Other Countries [Past Three Years])



Minister of Defense Kishi signing a memorandum on Japan-Brazil defense cooperation and exchanges (December 2020)

12 Latin American Countries

Many Latin American countries share basic values with Japan, and some of them are situated on the Pacific Ocean.

With Colombia, in December 2016, Japan and Colombia signed a memorandum on defense exchanges.

With Brazil, in December 2020, Minister of Defense Kishi held the first Japan-Brazil Defense Ministers' Meeting online with Minister of Defense Fernando Azevedo e Silva. At the meeting, the two ministers signed a memorandum on Japan-Brazil defense cooperation and exchanges, and agreed to further develop defense cooperation and exchanges.

With Jamaica, in December 2019, Prime Minister and Defense Minister Holness visited Japan and met with Defense Minister Kono.

With Chile, in January 2021, the Chief of Staff, MSDF had a video teleconference with Admiral Julio Leiva Molina, Commander-in-Chief, to promote exchanges between the two navies.

See Reference 41 (Recent Defense Cooperation and Exchanges with Other Countries [Past Three Years])

3 Promotion of Multilateral Security Cooperation

1 Multilateral Security Framework and Dialogue Initiatives

Multilateral framework initiatives, especially the ADMM-Plus and the ASEAN Regional Forum (ARF),¹⁵ have made steady progress and served as an

important foundation for dialogue and cooperation and exchanges on the security of the Asia Pacific. Japan puts importance on such multilateral frameworks and intends to strengthen cooperation and mutual confidence with countries in the region. Moreover, Japan hosts the Japan-ASEAN Defense Vice-Ministerial Forum and

¹⁵ The ARF, a forum aimed at improving the security environment in the Asia-Pacific region through dialogue and cooperation on political and security issues, has been held since 1994. The ARF currently comprises 26 countries and one organization as members and holds various inter-governmental meetings that are attended by both foreign affairs and defense officials to exchange opinions on the regional situation and the security area. The 26 countries are the 10 ASEAN member states (Brunei, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, Vietnam, Cambodia (since 1995) and Myanmar (since 1996)), Japan, Australia, Canada, China and India (since 1996), New Zealand, PNG, the ROK, Russia, the United States and Mongolia (since 1998), North Korea (since 2000), Pakistan (since 2004), Timor-Leste (since 2005), Bangladesh (since 2006), and Sri Lanka (since 2007). The organization member is the EU.

the Tokyo Defense Forum, which contribute to the multilateral defense cooperation.

- See** Reference 42 (Record of Major Multinational Security Dialogues [Indo-Pacific Region; Past Three Years])
 Reference 43 (Multilateral Security Dialogues Hosted by the Ministry of Defense)
 Reference 44 (Other Multilateral Security Dialogues)

(1) Initiatives under the ADMM-Plus

The ASEAN member states hold the ASEAN Defence Ministers' Meeting (ADMM), a ministerial level meeting among defense authorities in the ASEAN region, and the ADMM-Plus comprising eight ASEAN member states including Japan.¹⁶

The ADMM-Plus is the only meeting hosted by a government which allows defense ministers in the Indo-Pacific region, including ASEAN member states to attend. Thus, the ADMM-Plus is highly significant from the perspective of promoting the development and deepening of regional security and defense cooperation. The MOD/SDF has been actively participating in and providing support for the meeting. There are (1) the ASEAN Defence Senior Officials' Meeting (ADSOM)-Plus, (2) ADSOM-Plus Working Group (ADSOM-Plus WG), and (3) EWGs under the ministerial level ADMM-Plus.¹⁷

In December 2020, Minister of Defense Kishi attended the 10th Anniversary of the Founding of ADMM-Plus held online and gave a speech on behalf of the ADMM-Plus countries. In his speech, Minister Kishi expressed that Japan has consistently respected the leading role of ASEAN and has actively supported ASEAN's efforts on non-traditional security issues. He emphasized that Japan has continued to advocate that regional security issues should be overcome through reason and dialogue, and expressed Japan's resolve to continue contributing to regional security cooperation.

In addition, Minister of Defense Kishi attended the 7th ADMM-Plus held online and expressed Japan's resolve to make every effort to create a free and open international order based on the rule of law. Minister Kishi stated that ASEAN made a concerted effort to enhance the efficacy of cooperative infectious disease control frameworks, and expressed Japan's determination to promote defense cooperation on infectious disease control. Minister Kishi expressed his full support for the ASEAN Outlook on the Indo-Pacific (AOIP), announced by ASEAN in June 2019, which shares many fundamental commonalities



Minister of Defense Kishi giving a speech at the 10th anniversary of the Founding of the ADMM-Plus (December 2020)

with Japan's FOIP concept.

On the South China Sea issue, Minister Kishi stated that Japan strongly opposes unilateral attempts to change the status-quo by coercion and Japan's position that the Code of Conduct in the South China Sea (COC), based on the rule of law, should not infringe the legitimate rights and interests of all stakeholders. On issues related to international security, Minister Kishi highlighted the imperative of ensuring the full implementation of relevant UN Security Council resolutions, including through measures against North Korean ship-to-ship transfers.

In addition, regarding EWGs, which provide practical cooperation in seven fields,¹⁸ Minister Kishi stated that Japan, as co-chairs with Vietnam, will commence activities from April 2021 as part of the fourth cycle¹⁹ of the ADMM-Plus Experts' Working Group on peacekeeping operations, and expressed his determination to contribute to the region through its co-chairing role in this forum.

On this occasion, the Ministers adopted the Joint Declaration on "Strategic Security Vision of the ADMM-Plus."

- See** Fig. III-3-1-4 (Organizational Chart and Overview of the ASEAN Defence Ministers' Meeting-Plus [ADMM-Plus])

¹⁶ The ADMM-Plus was founded in October 2010. Japan, the United States, Australia, the ROK, India, New Zealand, China and Russia participate in this meeting as Dialogue Partners.

¹⁷ Japan proactively contributed to the EWGs. In 2019, Japan participated in the EWG on counter-terrorism in January, April, September, October and December, in the EWG on HA/DR in March, April, July and October, in the EWG on Maritime Security in February, May, and September, and in the EWG on Military Medicine in February, March and October, in the EWG on PKO in March and September, in the EWG on Humanitarian Mine Action in March, September and December, and in the EWG on Cyber Security in May and August. In 2021, Japan participated in the EWGs on Cyber Security, Maritime Security and Military Medicine in March.

¹⁸ Expert meetings have been established in the following seven areas: counter-terrorism, HA/DR, maritime security, military medicine, PKO, humanitarian mine action, and cyber security.

¹⁹ First cycle (2011-2013), second cycle (2014-2016), third cycle (2017-2019), fourth cycle (2021-2024)

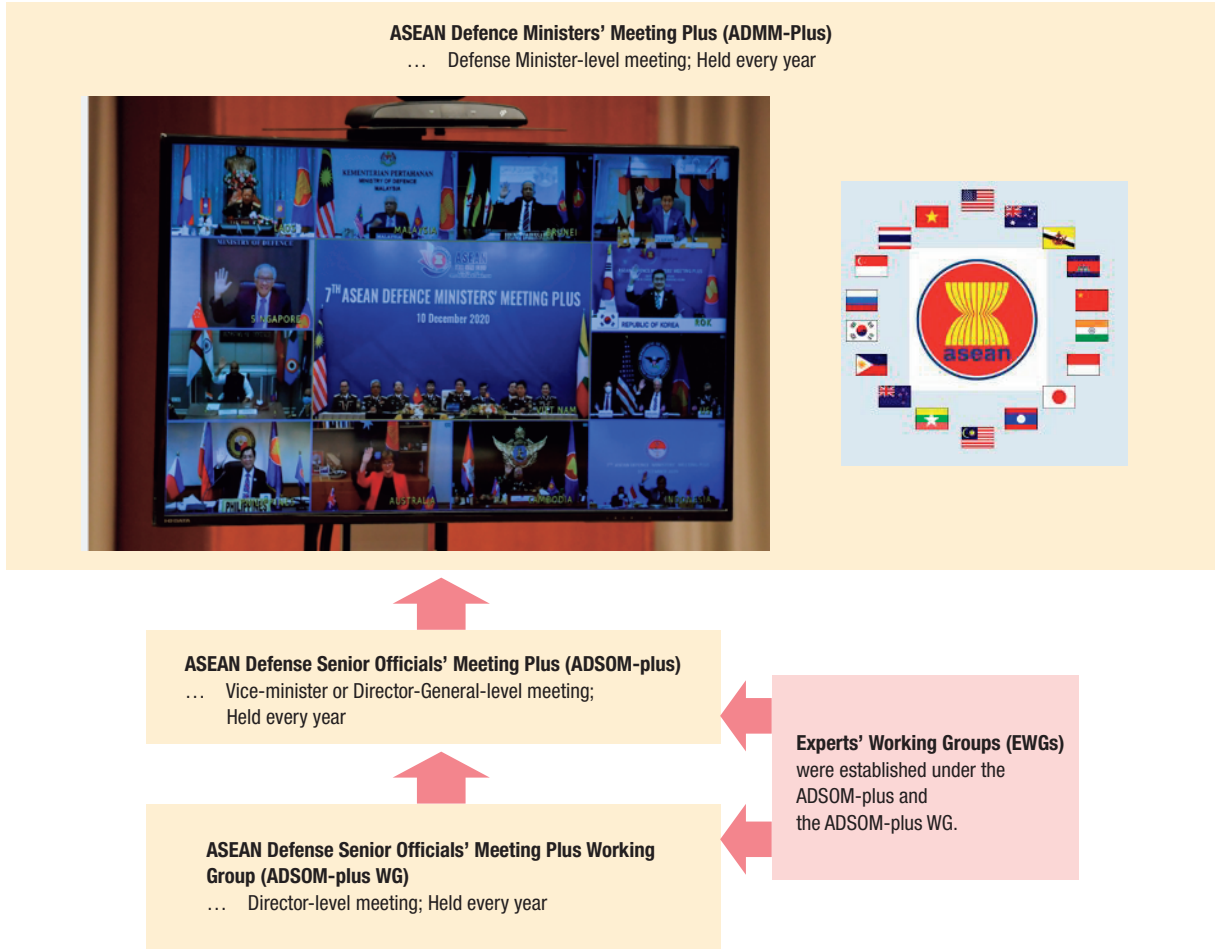
Fig. III-3-1-4 Organizational Chart and Overview of the ASEAN Defence Ministers' Meeting-Plus (ADMM-Plus)

ASEAN Defence Ministers' Meeting-Plus (ADMM-Plus)

The only government-sponsored official meeting of the defense ministers in the Indo-Pacific region that includes countries outside the ASEAN region

* Participating countries: 10 ASEAN member countries + 8 countries (Australia, China, India, Japan, New Zealand, ROK, Russia, and the U.S.)

The Experts' Working Groups (EWGs) established under the framework of the ADMM-Plus take practical actions, such as joint exercises, to address security issues in the Indo-Pacific region, which is a unique feature of the ADMM-Plus.



Experts' Working Groups (EWGs)

EWGs were established in seven fields. Each EWG is hosted jointly by one of the 10 ASEAN member countries and one of the additional 8 countries for a term of three years.

* Seven fields: (i) counter-terrorism, (ii) HA/DR, (iii) maritime security, (iv) military medicine, (v) PKO, (vi) humanitarian mine action, and (vii) cyber security

EWGs respectively take practical actions such as sharing information, holding workshops and seminars, conducting joint training, and submitting recommendations and reports concerning respective areas.

(2) ARF

Regarding the ARF, in which mainly diplomatic authorities are engaged, concrete efforts²⁰ have been made in recent years for specific initiatives in non-traditional security areas such as disaster relief, maritime security, and peacekeeping and peace

building. The MOD/SDF has been making active contributions to this forum.

For example, at an Inter-Sessional Meeting on Maritime Security (ISM on MS) that has been held since 2009,²¹ Japan has taken the lead in formulating a collection of best practices concerning assistance for capacity building

²⁰ In addition to the Ministers' meeting at the foreign minister level, the Senior Officials' Meeting (SOM) and Inter-Sessional Meetings (ISM) are held each year, as well as meetings of the Inter-Sessional Support Group on Confidence Building Measures and Preventive Diplomacy (ISG on CBM/PD) and the ARF Security Policy Conference (ASPC). Moreover, since the Ministers' meeting in 2002, the ARF Defense Officials' Dialogues (DOD) has been held ahead of the main meeting.

²¹ In 2011, Japan, Indonesia and New Zealand co-hosted the third ISM on MS in Tokyo. In 2017, Japan, the Philippines and the United States co-hosted the ninth one in Tokyo.

in the field of maritime security.

In the field of disaster relief, the MOD/SDF has dispatched SDF personnel and aircraft to ARF Disaster Relief Exercises (ARF-DiREx) conducted since 2009.

(3) Multilateral Security Dialogues Sponsored by the MOD/SDF

a. ASEAN-Japan Defence Ministers' Informal Meeting and Vientiane Vision 2.0

Based on the proposal by Prime Minister Abe at the ASEAN-Japan Commemorative Summit in December 2013, the first ASEAN-Japan Defence Ministers' Informal Meeting took place in Bagan, Myanmar, in November 2014. This meeting, in which opinions were exchanged on cooperation in non-traditional security areas such as HA/DR and maritime security, was a breakthrough opportunity bringing defense ministers from Japan and the ASEAN member states together for the first time in the history of nearly 50 years of friendship and cooperation between Japan and ASEAN. This marked an important first step towards strengthening defense cooperation in the future.

In November 2019, at the 5th ASEAN-Japan Defence Ministers' Informal Meeting, Defense Minister Kono announced an updated version of Japan's original initiative Vientiane Vision; "Vientiane Vision 2.0."

The Vientiane Vision presents an overall picture of the priority areas of the future direction of ASEAN-wide defense cooperation in a transparent manner. It retains the basic framework of the initial Vision, including its objectives, direction, and means of cooperation, but introduces three new pillars: firstly, establishing three principles of Japan-ASEAN cooperation which are "heart-to-heart cooperation," "tailored and lasting cooperation" and "equal and open cooperation;" secondly, introducing the concept of "resilience" to clarify the connection between our efforts and ASEAN's centrality and unity; and thirdly, pursuing synergies between the AOIP and Japan's FOIP.

Furthermore, Minister of Defense Kishi attended the 6th Japan-ASEAN Defence Ministers' Informal Meeting held online in December 2020, and announced a new program under "Vientiane Vision 2.0" – the "Japan-ASEAN Cyber Security Training Program for Defense Authorities."²² ASEAN member state ministers welcomed the proposal, and expressed their expectation for the furtherance of practical Japan-ASEAN defense cooperation in the future.

In the field of HA/DR, since 2018, Japan has held the Japan-ASEAN Invitation Program on HA/DR. In February 2020, Japan held the third round of the

invitation program, inviting participants from all ASEAN member states and the ASEAN Secretariat. In addition to a seminar on Japan's response procedures in the event of a large-scale disaster, table-top exercises and disaster prevention drill inspections were held.

In the field of international law, in November 2018, Japan invited all ASEAN member states and the ASEAN Secretariat to the Japan-ASEAN Symposium on International Law titled "Regional Cooperation in the Indo-Pacific and the Rule of Law."

In the field of international aviation law and security in the air of aviation, the Professional Airmanship Program was held for the first time in July 2019, inviting all ASEAN member states and the ASEAN Secretariat. During the program, the participants attended a symposium and base visits to promote confidence building among the air components of Japan and ASEAN member states, contribute to ensuring the rule of law in the Indo-Pacific region, and bring better impact on the regional stability.

In addition, in June 2019, the Japan-ASEAN Ship Rider Cooperation Program was conducted on board the Destroyer JS "Izumo," during the Indo-Pacific Deployment, with 10 participants from all ASEAN member states and the Secretariat. In the program, participants experienced a five-day voyage from Muara in Brunei to Subic in the Philippines, during which seminars on international maritime law and HA/DR at sea and a table top exercise on HA/DR at Sea were also conducted to improve their knowledge of maritime security.

Through these initiatives, Japan has worked to promote capacity building, mutual understanding, and network building with participants from all ASEAN member states through seminars and training programs in various areas, including maritime security and HA/DR, while also fostering a shared recognition about international law, which has contributed to the stability of the Indo-Pacific region.

 See Reference 45 (Vientiane Vision 2.0)

b. Japan-ASEAN Defense Vice-Ministerial Forum

Since 2009, the MOD has annually held the Japan-ASEAN Defense Vice-Ministerial Forum for the purpose of strengthening bilateral and multilateral relationships through the development of human networks between Japanese and ASEAN vice-ministerial level officials.

The forum was canceled in 2020 due to the COVID-19 pandemic.

c. Tokyo Defense Forum, etc.

The MOD has held the Asia-Pacific Defense Forum (Tokyo Defense Forum) since 1996 for senior officials in charge of defense policy (Director-General level officials and general-level officers) from the countries in

²² SDF personnel serve as instructors in a seminar for ASEAN countries' cybersecurity personnel with the aim of enabling them to respond more appropriately to cyber incidents.

the region to discuss defense policies of the participating countries and confidence-building measures in the field of defense.

The forum was canceled in 2020 and 2021 due to the COVID-19 pandemic.

(4) Others

a. International Conferences Hosted by Private Organizations

International conferences on security include not only intergovernmental conferences but also meetings organized by private organizations in which various people, such as government officials, scholars, and journalists, participate to discuss medium- to long-term security issues.

Major international conferences organized by private bodies include the IISS Asia Security Summit (Shangri-La Dialogue),²³ IISS Regional Security Summit (Manama Dialogue),²⁴ organized by the International Institute for Strategic Studies (IISS), and the Munich Security Conference,²⁵ one of the most prestigious meetings on security in Europe and the United States. Defense Minister and MOD officials actively participate in these meetings, holding talks with defense ministers and other representatives from other countries, while making speeches at these meetings, in order to build trust and share mutual recognition with high-level officials and to send out positive messages.

In November 2019, Defense Minister Kono attended the 15th Manama Dialogue. This was the first time for a Japanese Defense Minister to participate in the event. At the meeting, he delivered a speech and held bilateral talks with the French Minister of the Armed Forces and ministerial-level officials from Jordan, Bahrain, and Yemen. In his speech, Minister Kono stated that Japan has continuously contributed to peace and stability in the Middle East based on an understanding that an open and secure maritime order provides the basis for a stable and prosperous international community, and that the SDF is forging broader and closer ties with this Middle East through human contributions to maritime security in the region, participation in exercises, defense equipment cooperation, person-to-person links, and other initiatives. He also stated that Japan attaches importance to the freedom of navigation and the rule of law at sea, and that, in order to ensure the safety of Japan-related ships

and to secure the peace and stability of the Middle East region, Japan has explained how it can best utilize the assets of the SDF as its independent efforts to reinforce information gathering.

In December 2019, Defense Minister Kono also attended the 19th Doha Forum organized by the Government of Qatar for the first time as a defense minister. He held bilateral meetings with the Ministers of Defense of Qatar and Malaysia and the Chairman of the Joint Chiefs of Staff of Jordan, while also delivering a speech at the main meeting. In his speech on multilateral security cooperation, Defense Minister Kono expressed concern over the strengthening of North Korea's military capabilities, including its nuclear and missile capabilities. He also stated that it is necessary to reinforce arms control and disarmament and the rule of law in the international community, and that Japan is working with other countries to promote FOIP through bilateral/multilateral exercises, capacity building, and defense equipment and technology cooperation based on the rule of law. He cited Vientiane Vision 2.0 as an example of Japan's multilateral security cooperation efforts, and said that Japan would continue to promote multilateral security cooperation.

Minister of Defense Kono and Minister of Foreign Affairs Motegi attended the 56th Munich Security Conference in February 2020. On the occasion of the conference, Minister of Defense Kono held the first defense ministerial meeting with H.E. Andriy Zahorodnyuk, Ukrainian Minister of Defence, as well as bilateral and other meetings with the defense ministers of Canada, France, and Germany, as well as with the High Representative of the EU and the Secretary General of NATO, where they exchanged views on defense cooperation and exchanges and regional situations.

b. Service-to-Service Exchange Initiatives

In August 2020, the Chief of Staff, JS participated in the online Indo-Pacific Chiefs of Defense Conference (CHOD) co-hosted by the U.S. INDOPACOM and Republic of Fiji Military Forces. The conference promoted mutual understanding of Japan's and other countries' defense policies and views on the situation.

In November, the Chief of Staff, JS participated online in the Indo-Pacific Joint Heads of Pacific Security Conference (JHoPS) co-hosted by the Australian Defence Forces, federal police and border forces. Senior military and police delegates from about 25 countries and regions from primarily

²³ This is a multilateral conference sponsored by IISS, a private U.K. think tank, in which defense ministers from various countries participate with the objective of discussing defense-related issues and regional defense cooperation. It has been held in Singapore every year since 2002 and is known as the Shangri-La Dialogue, named after the hotel where it takes place. The conference was canceled in 2020 and 2021 due to the COVID-19 pandemic.

²⁴ An international conference hosted by the IISS, where foreign and defense authorities and other stakeholders mainly from Middle Eastern countries exchange views on security issues. It is held annually in Manama, Bahrain.

²⁵ This is one of the most prestigious international security meetings organized by private bodies in Europe and the United States and has been held annually (usually in February) since 1962. Usual participants in the meeting include officials at the ministerial level from major European countries as well as top leaders, ministers, and lawmakers from countries in the world, and key executives of international organizations.



Chief of Staff, GSDF Yuasa participating in the Indo-Pacific Landpower Conference online (May 2020)



Chief of Staff, MSDF Yamamura participating in a multilateral video teleconference hosted by the Commander of the U.S. Navy Pacific Fleet (December 2020)



Chief of Staff, ASDF Izutsu participating online in the Chiefs of Air Staff Conclave hosted by the Indian Air Force (February 2021)

Pacific Island countries discussed the COVID-19 pandemic and disaster response. Through this conference, the Chief of Staff noted Japan's promotion of a mutual understanding on maritime security and disaster response in Japan and other countries, and spoke about how regional cooperation is important even during the COVID-19 pandemic, and that Japan will actively cooperate.

In May, the Chief of Staff, GSDF participated in the Indo-Pacific Landpower Conference, a video teleconference hosted by the commander of the U.S. Army Pacific. Senior army members from 23 countries in northeast and southeast Asia and Oceania participated in the conference. Participants agreed to continued cooperation as countries that share common values in order to realize FOIP, and affirmed the necessity to share lessons learned in their responses to the COVID-19 pandemic.

In September and December, the Chief of Staff, MSDF participated in a multilateral video teleconference hosted by the Commander of the U.S. Pacific Fleet. Navy Chiefs of Staff from more than a dozen countries in the Indo-Pacific region participated in the conference, and shared the view to continue defense cooperation and exchanges with each other by leveraging the advantage of the

strengths of the navy to be able to conduct training even under the circumstances of the COVID-19 pandemic.

In April of the same year, the Chief of Staff, ASDF participated in a multilateral video teleconference hosted by the commander of the U.S. Pacific Air Forces. The Chiefs of air forces in the Indo-Pacific region participated in the meeting, and shared lessons learned on responses to the COVID-19 pandemic, and agreed to continue service-to-service cooperation. In February 2021, he participated in the online Chiefs of Air Staff Conclave hosted by the Indian Air Force, and in a speech on the theme of the "Importance of Air Power in the Indo-Pacific," spoke about the importance of cooperation and coordination in the region.

2 Promoting Practical Multilateral Security Cooperation Initiatives

(1) Pacific Partnership

The Pacific Partnership (PP), which started in 2007, is an initiative in which naval vessels, primarily those from the U.S. Navy, visit countries in the Asia-Pacific region to provide medical care, conduct facility repair activities, and engage in cultural exchange to strengthen cooperation between countries participating in the initiative and facilitate international peace cooperation activities through cooperation with governments, military forces, international organizations, and non-governmental organizations (NGOs) in those countries. Japan has dispatched SDF medical personnel and units under the Pacific Partnership since 2007.

(2) Multilateral Exercises

a. Significance of Multilateral Exercises in the Indo-Pacific Region

In the Indo-Pacific region, the MOD/SDF has actively participated in multilateral training and exercises in non-traditional security fields, such as HA/DR and Non-



The Destroyer JS "Ashigara" conducting missile launch training during the Multilateral Exercise "RIMPAC 2020" hosted by the U.S. Navy (August 2020)



MSDF members participating in the Multilateral Anti-Submarine Exercise "Sea Dragon 2021" (January 2021)

combatant Evacuation Operations (NEO), in addition to traditional training conducted in preparation for combat situations. It is important to participate in such multilateral exercises so as not only to raise the skill level of the SDF, but also to create a cooperative platform with relevant countries. In light of this perspective, the MOD/SDF intends to continue to actively engage in such training.

b. Initiatives for Multilateral Exercises

The multilateral relationships have recently shifted from the phrase for building trust to the phrase for developing more concrete and practical cooperative relationships. Various multilateral training and exercises have been actively conducted as important initiatives to effectively help this shifting.

The SDF have been participating in the Multilateral Exercise "Cobra Gold" cohosted by the United States and Thailand since 2005. During "Cobra Gold 20," in which the SDF took part in 2020, the SDF conducted training related to the rescue of Japanese nationals overseas to

enhance joint operation capacities.

In August 2020, the MSDF participated in the Multilateral Exercise "RIMPAC 2020" hosted by the U.S. Navy in the sea and airspace around the Hawaiian Islands. In January 2021, the MSDF participated in the U.S.-hosted Multilateral Anti-Submarine Exercise "Sea Dragon 2021" in the surrounding sea areas and airspace of Guam, and in February, took part in the Pakistan Navy-hosted Multilateral Exercise "AMAN 21" in the surrounding sea areas and airspace of the northern Arabian Sea. In April, the MSDF participated in the Multilateral Maritime Exercise "La Perouse 21" with France, the U.S., Australia and India, in the Bay of Bengal.

From January to February, the ASDF participated in the Multilateral Exercises "Cope North 21" with the United States and Australia.

 **See** Reference 46 (Participation in Multilateral Exercises [Past Three Years])



Video: Operation Pacific Ambassador 2020

URL: <https://youtu.be/UqJ2YSd02SQ>

4 Proactive and Strategic Initiatives for Capacity Building

1 General Situation

In today's security environment, no country can maintain its peace and stability on its own. It is indispensable for the international community to unite to resolve global issues. The defense authorities of Southeast Asian and other countries have either requested the MOD to undertake capacity building, or expressed their expectations for such cooperation. In response to such expectations, the MOD/SDF started to provide capacity building in the security and defense areas in 2012.

Capacity building has the following objectives: (1) creating a desirable security environment for Japan by supporting partner countries in the Indo-Pacific region to develop their own capacity in a sustainable manner, and enabling the recipient countries' forces to undertake adequate roles in maintaining international peace and regional stability; (2) strengthening bilateral relationships with partner countries; (3) strengthening relationships with other donor countries, such as the United States and Australia; and (4) promoting Japan's proactive and independent efforts to realizing regional peace and stability, and to gain trust in the MOD/SDF as well as the whole of Japan.

The MOD/SDF will implement capacity building programs effectively by carefully coordinating with diplomatic policies and combining various means to maximize effects, while also tapping into the knowledge accumulated by the SDF to date.

2 Specific Activities

The MOD/SDF has provided capacity building in such areas as HA/DR, PKO, and maritime security to 15 countries and one organization in the Indo-Pacific region.

The MOD/SDF's capacity building programs are aimed at improving the capabilities of recipient countries in a concrete and steady manner over a certain period of time.

Some programs are carried out by dispatching MOD/SDF officials to the recipient country, by inviting the recipient country's officials to Japan, or by a combination of both. With the first method, SDF officials with technical knowledge are dispatched to the recipient country to help said country's forces and their related organizations

through seminars, lectures, and technical guidance. With the second method, the recipient country's officials are invited to the MOD/SDF's units to improve the skills of trainees and to share knowledge of human resources development that the MOD/SDF provides through seminars, lectures, and training programs.

In addition, online lectures and practical training have been introduced as a new means of capacity building from 2021, in light of the COVID-19 pandemic.

The number of personnel dispatched for capacity building programs conducted from January 2020 to March 2021 was 33 (four countries, seven projects), and the number of those invited was 57 (three countries, one organization and four projects). In addition, online lectures and practical training were conducted for a total of 11 people (two countries, two programs).

Specifically, some of the dispatches for capacity building projects conducted by the SDF included education and guidance on vehicle maintenance management in Timor-Leste, cybersecurity seminars and air rescue seminars in Vietnam, which aimed at improving the country's incident response capabilities, and air rescue seminars for the Sri Lanka Air Force. In addition, for Myanmar, the SDF conducted practical training and underwater medical seminars to establish the Air Force's meteorological unit, and also invited a Myanmar medical officer for training on the submarine rescue ship "Chiyoda," in which they actively exchanged views on the field of underwater



Ground Self-Defense Force personnel providing online education to the PNG Army (March 2021)



Video: Capacity building in PNG (training for Military Band)

URL: https://youtu.be/VII_S03YPOw

Fig. III-3-1-5 Recent Capacity Building Initiatives (from January 2020 to March 2021)

Capacity Building

Capacity building ... Project aiming to improve the capabilities of partner countries in a concrete and steady manner over a certain period of time through dispatch of SDF personnel, etc., and invitation of personnel from recipient countries

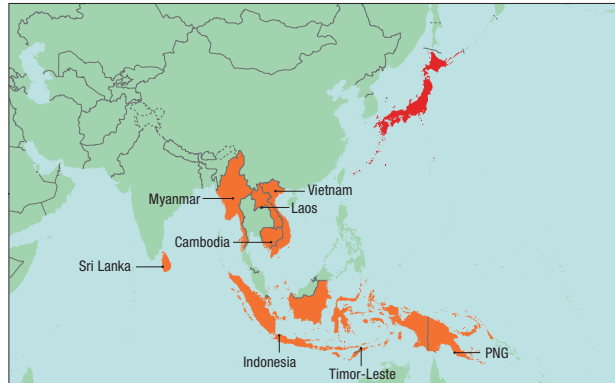
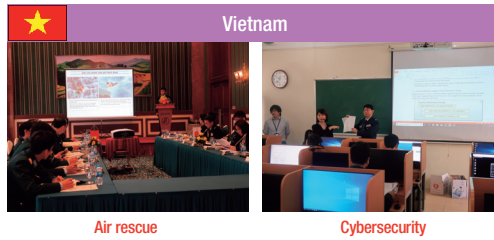
Dispatch ... Dispatch SDF personnel or others with expert knowledge to partner countries to provide seminars, exercises, lectures, technical guidance, etc., with the aim of improving the capabilities of military forces and related knowledge of recipient countries.

Invitation ... Invite officials of partner countries to the MOD, SDF units or other related organizations, and provide them with seminars, exercises, lectures, education and training, etc., for sharing knowledge concerning human resource development initiatives for the MOD and SDF and for capacity building of officials of partner countries.

* Online seminars and exercises have been incorporated a new method for capacity building from 2021, taking into account the impacts of the COVID-19 pandemic.

Countries for which capacity building has been provided and fields (January 2020-March 2021)

* shows program provided together with the United States and Australia.
* Those in red are fields shown in photos.



medicine.

As for invitations, education and guidance were provided for HA/DR training for Indonesia, construction management such as road restoration for Laos, and heavy equipment operation training in the field of engineering.

In addition, for Cambodia, online education was provided for the first time to train road surveying instructors in support in the field of engineering that contributes to UN PKO. The SDF also provided online engineering equipment education to engineering units that contribute to HA/DR in Papua New Guinea, which is a new field of support following the SDF's support for developing military bands since 2015.

In addition, as part of capacity building for Africa, the MOD/SDF implemented a program for supporting

the enhancement of disaster response capacity for the Djibouti Armed Forces, including training on how to operate engineering equipment, such as hydraulic shovels, graders, and dozers, in order to strengthen the bilateral relationship since 2016.

Fig. III-3-1-5 (Recent Capacity Building Initiatives [from January 2020 to March 2021])

3 Collaboration with Related Countries

In efforts to stabilize the regional security environment, collaboration with other donor countries is essential. In particular, collaboration with the United States, and Australia is considered a priority.

Firstly, between Japan and the U.S., the joint statement

of the Japan-U.S. “2+2” in April 2015 states that the two countries would strengthen their continued close coordination on cooperation including capacity building to realize peace, stability, and prosperity in the region. The two ministers agreed to promote defense cooperation with Southeast Asian countries.

Between Japan and Australia, under a Japan-Australia personnel exchange program, the MOD has received five officials from the Australian Department of Defense five times since 2013. In exchange, the MOD has dispatched four officials to the Australian Department of Defense four times since 2015.

In November 2017, Japan and Australia held the first

working group on capacity building.

Japan has also cooperated with the United States and Australia in providing capacity building to Timor-Leste. The SDF and the U.S. forces participated in the Harii Hamutuk Exercise sponsored by the Australian forces in Timor-Leste five times since October 2015, providing technical guidance on engineering for engineering units of the Timor-Leste forces.

It is important for Japan and other countries providing capacity building to conduct such cooperation effectively and efficiently by closely coordinating with and mutually complementing each other.

Section 2

Ensuring Maritime Security

The NDPG states that for Japan, a maritime nation, strengthening the order of “Open and Stable Seas” based on fundamental norms, such as the rule of law and the freedom of navigation, as well as ensuring safe maritime and air transport, is the foundation for its peace and prosperity, and is extremely important.

From this viewpoint, the MOD/SDF will promote assistance that contributes to improving capabilities pertaining to the maritime security of coastal states in the

Indo-Pacific region, such as India, Sri Lanka, and other South and Southeast Asian states.

Moreover, Japan is promoting such activities as bilateral/multilateral training and exercises, unit-to-unit exchanges, and active port visits on these occasions. Japan is also promoting activities such as counter-piracy efforts in cooperation with relevant countries and cooperation for strengthening the capabilities of the Maritime Domain Awareness (MDA).

1 Initiatives towards Ensuring Maritime Security

(1) The Fundamental Idea of the Government

The National Security Strategy (NSS) states that as a maritime state, Japan will play a leading role, in maintaining and developing “Open and Stable Seas,” which are upheld by maritime order based upon such fundamental principles as the rule of law, ensuring the freedom and safety of navigation and overflight, and peaceful settlement of disputes in accordance with relevant international laws, rather than by force.

The third Basic Plan on Ocean Policy was given Cabinet approval in May 2018. Taking a broad view of ocean policy from the perspective of security on the ocean, the Plan states that the government will act as one in undertaking “comprehensive maritime security.”

For this purpose, the government is working to secure the national interest in the territorial waters of Japan and stable use of its important sea lanes.

Furthermore, the government will further strengthen its efforts toward enhancement of MDA that collects and summarizes a variety of maritime information from ships, aircraft, etc., in order to use the information for measures regarding the sea.

Concerning the Code of Conduct in the South China Sea (COC), which China and ASEAN are continuing to

discuss, Japan has expressed its position that the COC should conform with international law including the UN Convention on the Law of the Sea (UNCLOS) and not infringe on the legitimate rights and interests of all parties of the South China Sea.

(2) Initiatives of the MOD/SDF

The MOD/SDF is conducting counter-piracy operations to secure stable use of sea lanes and information gathering activities to ensure the safety of Japan-related vessels in the Middle East. In addition, the MOD/SDF takes these opportunities to impress on the international community about the importance of the rule of law and of freedom of navigation. For example, in the ADMM-Plus in December 2020, Defense Minister Kishi stated his strong opposition to unilateral attempts to change the status quo by coercion and the creation of a *fait accompli*, urging for the peaceful resolution of dispute in accordance with international law, including the UNCLOS.

Within the framework of the Western Pacific Naval Symposium (WPNS), the MSDF is engaging in initiatives such as cooperation in the establishment of the Code for Unplanned Encounters at Sea (CUES).

2 Counter-Piracy Operations

1 Significance of Counter-Piracy Operations

Piracy is a grave threat to public safety and order on the seas. In particular, for Japan, which depends on maritime transportation to import most of the resources and food necessary for its survival and prosperity as a maritime nation, it is an important issue that cannot be ignored. The Japan Coast Guard (JCG), one of the law

enforcement agencies in Japan, is primarily responsible for coping with piracy. However, in cases where it is deemed extremely difficult or impossible for the JCG to cope with piracy by itself, the SDF is to take action as well.

For Japan and the international community, the waters off the coast of Somalia and in the Gulf of Aden are extremely important sea lanes, connecting Europe and

the Middle East with East Asia. Successive UN Security Council resolutions¹ were adopted, such as UN Security Council Resolution 1816, which was adopted in June 2008 in response to the frequent occurrence of and rapid increase in piracy incidents with the purpose of acquiring ransoms by detaining hostages caused by pirates, who are armed with machine guns and rocket launchers. These resolutions have requested that various countries take actions, particularly the dispatch of warships and military aircraft, to deter piracy in the waters off the coast of Somalia and in the Gulf of Aden.

To date, approximately 30 countries, including the United States, have dispatched their warships to the waters off the coast of Somalia and in the Gulf of Aden. As part of its counterpiracy initiatives, the EU has been conducting Operation Atalanta since December 2008, in addition to the counter-piracy operations conducted by the Combined Task Force 151 (CTF 151)² that was established in January 2009. Meanwhile, other countries have been dispatching their assets to the area.

As these initiatives by the international community have proved to be effective, the number of acts of piracy occurring in the waters off the coast of Somalia and in the Gulf of Aden has currently hovered at a low level.

However, the assumed root causes of piracy such as terrorism and poverty in Somalia have still remained unsolved. In addition, considering the fact that Somalia’s capability to crack down on piracy is also still insufficient, if the international community reduces its counter-piracy efforts, the situation could be easily reversed. Therefore, there is no great change in the situation in which Japan must carry out its counter-piracy operations.

See Part II, Chapter 5, 3-3 (Counter-Piracy Operations), p. 238
 Fig. III-3-2-1 (Piracy Incidents Off the Coast of Somalia and in the Gulf of Aden)

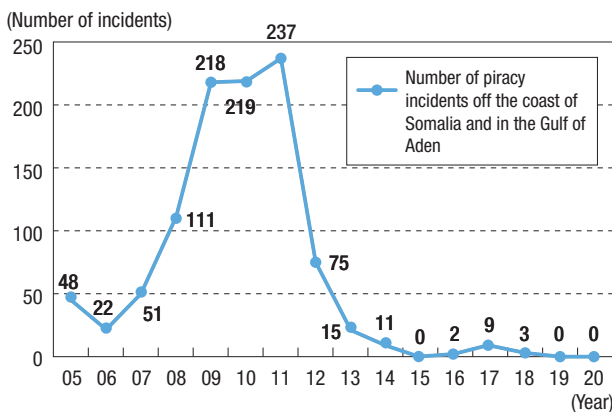
2 Japanese Initiatives

(1) Legislation Concerning Counter-Piracy Operations

In March 2009, following the order for Maritime Security Operations for the purpose of protecting Japan-affiliated vessels from acts of piracy in the waters off the coast of Somalia and in the Gulf of Aden, two destroyers³ began providing direct escort to Japan-affiliated vessels, while P-3C patrol aircraft also commenced warning and surveillance operations in June of the same year.

Japan subsequently enacted the Anti-Piracy Measures Act⁴ in July of the same year. This act made it possible to protect the vessels of all nations from acts of piracy, regardless of their flag states. Moreover, it also enabled

Fig. III-3-2-1 Piracy Incidents Off the Coast of Somalia and in the Gulf of Aden



Notes: The data is based on a report by the International Maritime Bureau (IMB) of the International Chamber of Commerce (ICC).



Destroyer JS "Onami" engaging in a counter-piracy operation in the Gulf of Aden (June 2020)




Video: Record of activities by the 35th DSPE
URL: <https://youtube.com/watch?v=00rAq4mBeG0&feature=share>

¹ Other UN Security Council resolutions calling for cooperation in deterring piracy are: Resolutions 1838, 1846, and 1851 (adopted in 2008), Resolution 1897 (adopted in 2009), Resolutions 1918 and 1950 (adopted in 2010), Resolutions 1976 and 2020 (adopted in 2011), Resolution 2077 (adopted in 2012), Resolution 2125 (adopted in 2013), Resolution 2184 (adopted in 2014), Resolution 2246 (adopted in 2015), Resolution 2316 (adopted in 2016), Resolution 2383 (adopted in 2017), Resolution 2442 (adopted in 2018) Resolution 2500 (adopted in 2019) and Resolution 2554 (adopted in 2020).
² The Combined Maritime Forces (CMF), the headquarters of which is located in Bahrain, announced the establishment of the CTF in January 2009 as a multilateral combined task force for counter-piracy operations.
³ The number of destroyers was changed to one from December 2016.
⁴ Official title: Acts on Punishment of and Measures against Acts of Piracy

the use of weapons to a reasonable extent, if no other means were available, in order to halt vessels engaging in acts of piracy, such as approaching civilian vessels.

Furthermore, the Act on Special Measures concerning the Security of Japanese Flagged Vessels in Areas that Are Highly Susceptible to Acts of Piracy came into force on November 2013, which made it possible to have security guards on board a Japanese ship provided certain requirements are met, enabling them to carry small arms for the purpose of security operations.

 See Reference 10 (Conditions Required for Main Operations of the Self-Defense Forces [Including Diet Approval] and Authority for the Use of Weapons Concerning Main Operations of the Self-Defense Forces)

(2) Activities by the SDF

a. Dispatch of the Deployment Surface Force for Counter Piracy Enforcement (DSPE) and Other Units

The SDF dispatches the DSPE, the Deployment Air Force for Counter Piracy Enforcement (DAPE), and the Deployment Support Group for Counter Piracy Enforcement (DGPE) to carry out counter-piracy operations.

The DSPE strives to ensure the safety of ships navigating in the area in two different manners – direct escort of private vessels across the Gulf of Aden, and zone defense in allocated areas in the Gulf of Aden, by using destroyers (one destroyer dispatched). There are JCG officers aboard the destroyer.⁵

The DAPE conducts counter-piracy activities using the P-3C patrol aircraft (two aircraft dispatched). The unit conducts warning and surveillance operations in the flight zone that is determined in coordination with the CTF 151 Headquarters and confirms any suspicious boats. At the same time, the unit also provides information to the MSDF destroyers, the naval vessels of other countries and civilian vessels, responding by such means as confirming the safety of the surrounding area immediately, if requested. The information gathered by MSDF P-3Cs is constantly shared with other related organizations, and contributes significantly to deterring acts of piracy and disarming vessels suspected as pirate ships.

In order to improve the operational efficiency and effectiveness of the DAPE, the DGPE carries out activities such as maintenance of the installation set up in the northwest district of Djibouti International Airport.

Additionally, the Airlift Squadron operates ASDF transport aircraft to carry out air transport of materials required by the DAPE and the DGPE, and airlifts, etc., are organized as needed.

In November 2020, in order to stably implement a self-sufficient response by the SDF in the event of an



CTF 151 commander and headquarters staff engaged in counter-piracy operations with other countries' military personnel in Bahrain (June 2020)

overseas P-3C patrol aircraft failure, in addition to increasing the number of airlift personnel, etc., to about 130, the number of personnel dispatched to counter-piracy operations support teams was increased to about 120 due to the renovations at the SDF installation in the Republic of Djibouti.

b. CTF 151 Deployed Unit at the Headquarters

In order to strengthen coordination with the units of other countries engaged in counter-piracy operations and enhance the effectiveness of the SDF's counter-piracy operations, the MOD has dispatched SDF personnel to the CTF 151 Headquarters since August 2014. During the period from May to August 2015, the SDF also dispatched a CTF 151 commander for the first time, while between March and June 2017, March and June 2018, and February and June 2020, a CTF 151 commander as well as staff were also dispatched to the Headquarters.

c. Achievements

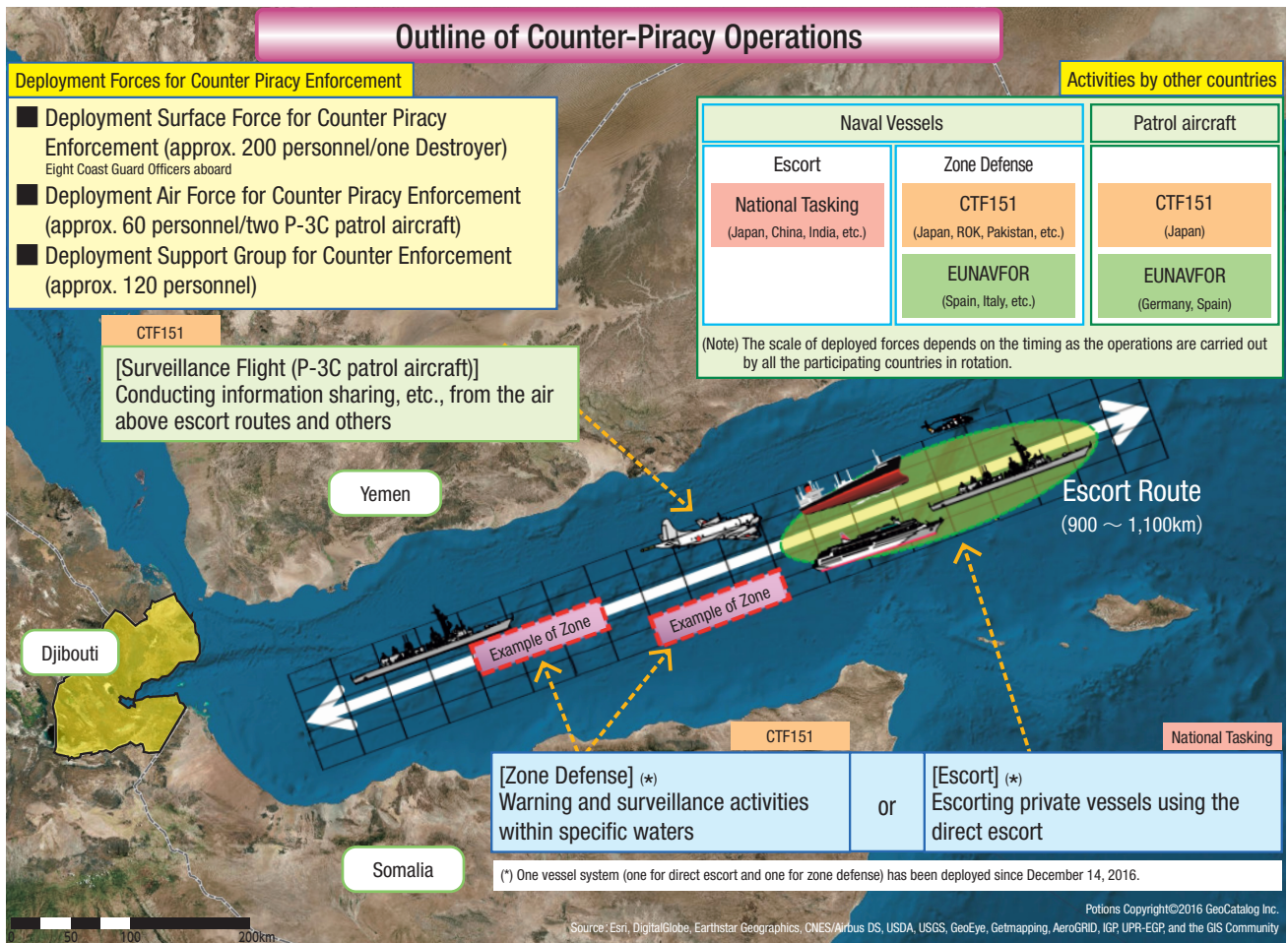
As of March 31, 2021, the DSPE has escorted 4,049 vessels. Under the protection of the SDF destroyers, not a single vessel has come to any harm from pirates and these vessels have all passed safely across the Gulf of Aden.

As of May 31, 2021, the DAPE has conducted the following activities: aircraft have flown 2,707 missions with their flying hours totaling 19,930 hours; and information was provided to vessels navigating the area and other countries engaging in counter-piracy operations on around 15,266 occasions. The activities conducted by the DAPE account for approximately 70 to 80% of the warning and surveillance operations carried out in the Gulf of Aden by the international community.

 See Fig. III-3-2-2 (SDF's Counter-Piracy Operations [Image])
Fig. III-3-2-3 (Structure of the Deployed Forces)

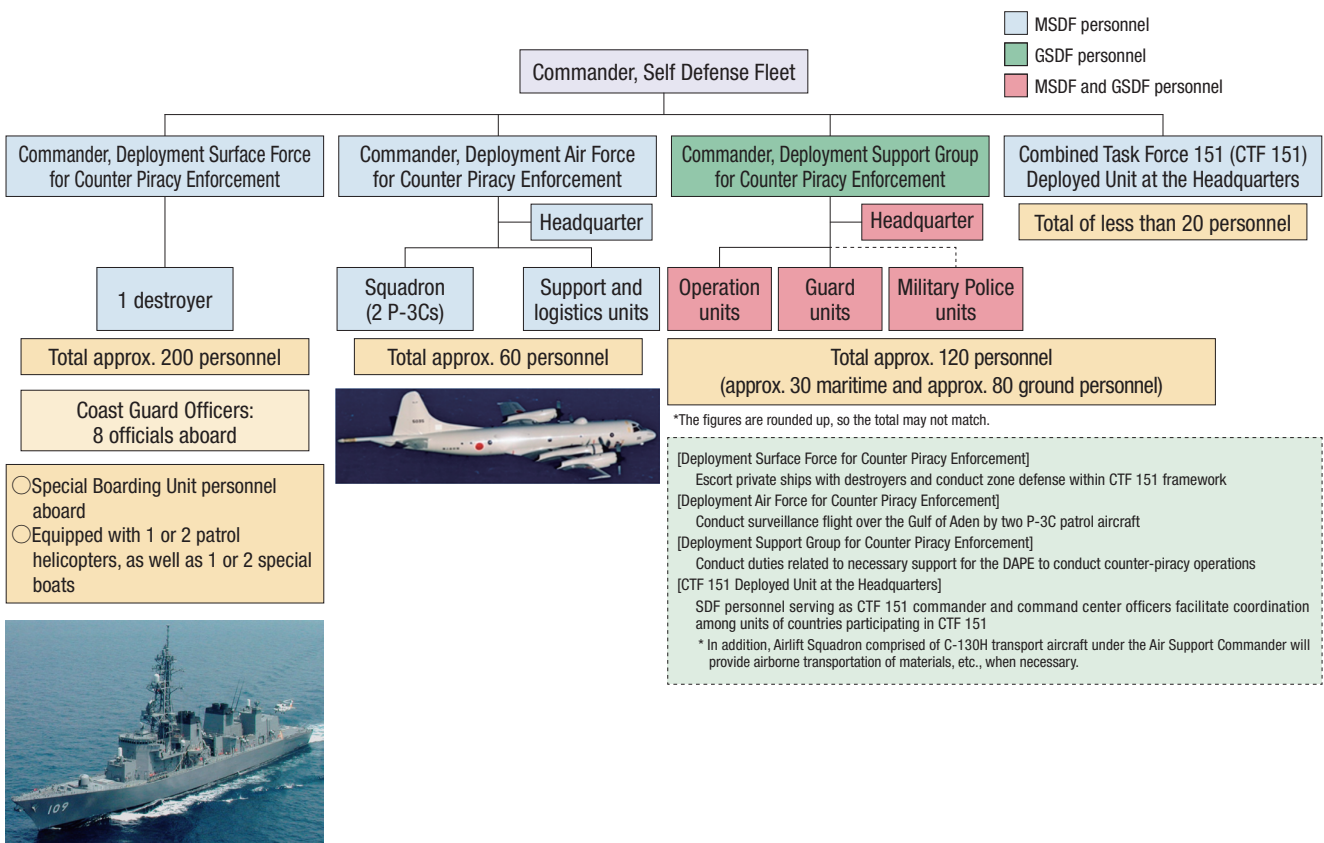
⁵ Eight JCG officers are aboard the MSDF destroyer and conducting judicial law enforcement activities, including arresting and interrogating pirates, as required.

Fig. III-3-2-2 SDF's Counter-Piracy Operations (Image)



Chapter 3
Security Cooperation

Fig. III-3-2-3 Structure of the Deployed Forces



VOICE

Voice of First Ambassador Hailing from the SDF Discussing Maritime Security

Mr. OTSUKA Umio, Ambassador Extraordinary and Plenipotentiary of Japan to the Republic of Djibouti

Djibouti is not a large nation from the perspective of its size, population, resources or GDP, but it is located adjacent to the strategic Bab el-Mandeb Strait that connects Africa with the Middle East. Coupled with its diplomatic mastery, this makes Djibouti a vital partner in maintaining a “Free and Open Indo-Pacific.” Djibouti is politically stable, and boasts one of the fastest growing economies in Africa, which has prompted many nations to establish military installations in the country, thus bringing further stability to the nation.

Japan began economic cooperation with Djibouti shortly after it achieved independence, and collaboration has disseminated to the grass-roots level across a wide range of fields including governance, education, infrastructure, health and hygiene, fostering a strong friendship between the people of Japan and Djibouti.

2021 marks the 10th anniversary of the Japan Self-Defense Force Installation in Djibouti. Over the past 10 years, the SDF counter-piracy operations carried out from Djibouti have contributed to the safety of global maritime transportation. Safe maritime transportation directly contributes to

the national interests of Djibouti, which is a major trading partner of Ethiopia. People also praise Japan's counter-piracy operations for bringing greater safety to the country, and the SDF personnel stationing in Djibouti serve as a bridge between the two nations.

In representing Japan as the Ambassador Extraordinary and Plenipotentiary, I will strive to form one team comprised of defense and diplomacy, and use the 10th anniversary of the Japan Self-Defense Force Base Djibouti as an opportunity to foster a deeper relationship between the two countries.



The author (right) standing with retired Commander Yamashita, who currently serves as the Official Residency Chef, working on the front-lines of cultural diplomacy through Japanese cuisine, in front of the dining area equipped with acrylic panels



The author (front right) delivering his credentials to the President of Djibouti [Office of the President of the Republic of Djibouti]

3 Praise for Japan's Endeavors

The counter-piracy operations by the SDF have been highly praised by the international community. For example, national leaders and others have expressed their gratitude and the SDF has also been repeatedly well-received by the UN Security Council Resolution. Moreover, the MSDF destroyers, which are engaging in counter-piracy operations off the coast of Somalia

and in the Gulf of Aden, has received many messages from the captains and ship owners of the vessels that its units have escorted, expressing their gratitude that the ships were able to cross the Gulf of Aden with peace of mind and asking them to continue escorting ships there. Additionally, the Japanese Shipowners' Association and other groups expressed appreciation for protection of Japan-related vessels and asked for continuation of efforts in fighting against piracy.

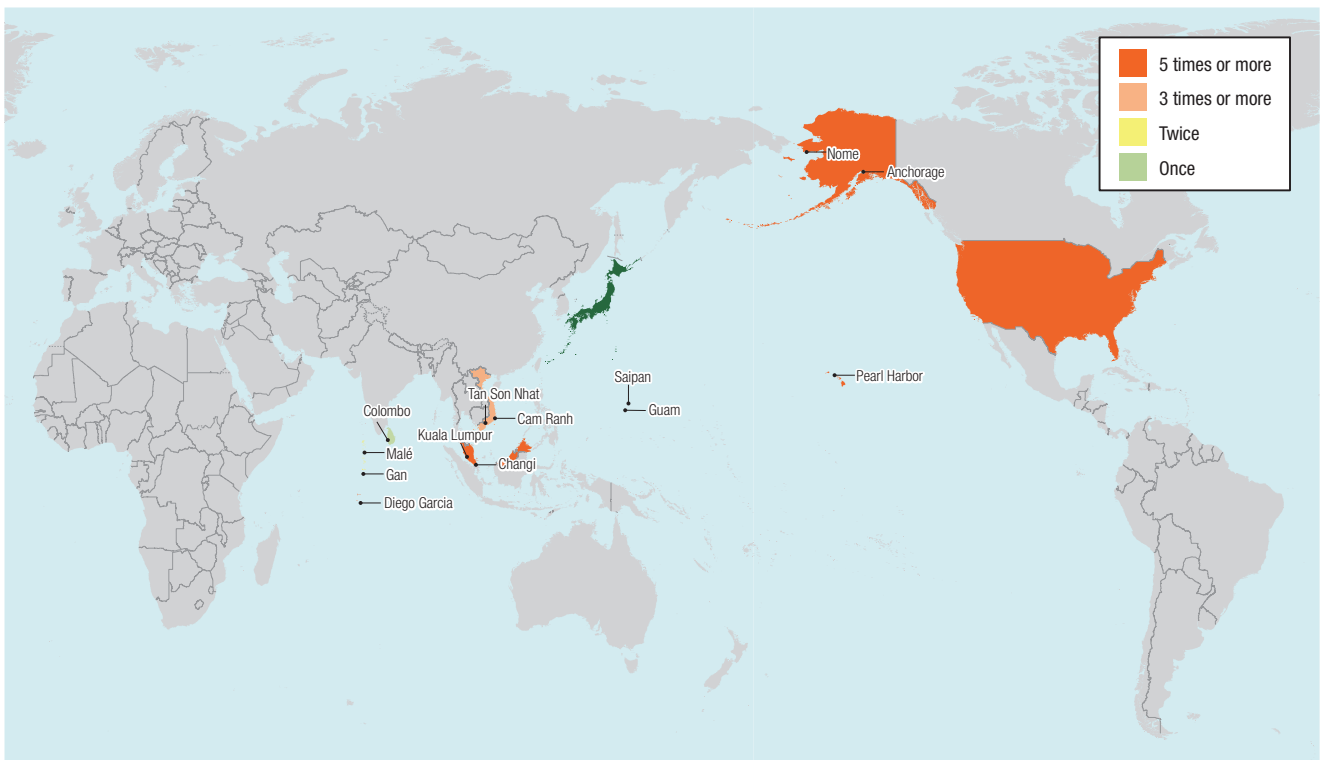
3 Training-Centered Initiatives

The MSDF not only endeavors to enhance its tactical skills through bilateral/multilateral training with Indo-Pacific coastal states, but also strives to contribute to peace and stability in the Indo-Pacific region, promote mutual understanding, and strengthen relationships of trust.

In the Indo-Pacific Deployment (IPD20), which

was implemented from September to October 2020, JS Kaga and other deployed units conducted a total of five bilateral and friendly drills, including Japan-U.S., Japan-India, and Japan-Australia drills, while actively making port calls and conducting bilateral and friendly drills on the way to and back from counter-piracy operations and

Fig. III-3-2-4 Visit to Ports and Airports by SDF (April 2020-March 2021)



deployment information gathering activities.

In addition, the Deployment Surface Force for Counter Piracy Enforcement is conducting drills with the EU and other organizations⁶ off the coast of Somalia and in the Gulf of Aden with the aim of strengthening counter-piracy capabilities and counter-piracy related cooperation.

Strengthening cooperation with coastal states of the

Indo-Pacific region through the bilateral exercise and port calls contributes to the maintenance of maritime security, which has extremely high significance.

See Reference 46 (Participation in Multilateral Exercises [Past Three Years])
 Fig. III-3-2-4 (Visit to Ports and Airports by SDF [April 2020-March 2021])

4 Cooperation in Maritime Security

The MOD/SDF has implemented capacity building in maritime security for Indonesia, Vietnam, the Philippines, Thailand, Myanmar, Malaysia, Brunei and Sri Lanka to help them enhance their MDA and other capabilities. Such programs contribute to strengthening cooperation with partner countries that share common strategic interests with Japan.

The Basic Plan on Ocean Policy, which was approved by a Cabinet decision in May 2018, calls for

strengthening cooperation related to maritime security with various countries through security dialogue and defense interaction among defense authorities at bilateral and multilateral levels with the aim of maintaining and advancing “free and open seas” supported by a maritime order defined by laws and rules. In response to this, the MOD has been working on cooperation for maritime security within regional security dialogue frameworks such as the ADMM-Plus and the ISM on MS.

⁶ The Deployment Surface Force for Counter Piracy Enforcement conducted joint counter-piracy exercises in June 2020 and February 2021 with the EU Naval Force (Spanish Navy), in July 2020 with the EU Naval Force (Spanish Navy) and the Korean Navy, in August 2020 with the Royal Navy, in October 2020 with the EU Naval Force (Spanish Navy/Air Force and German Navy), and in October 2020, and February and March 2021 with the Pakistani Navy.

Section 3

Cooperation in Use of Space and Cyber Domains

In the international community, there is a broadening and diversifying array of security challenges that cannot be dealt with by a single country alone. Rapid expansion in the use of space and cyber domains is poised to fundamentally change the existing paradigm of national security, which makes the establishment of international rules and norms a security agenda. The MOD/SDF will swiftly achieve superiority in space

and cyber domains by strengthening coordination and cooperation with relevant countries through information sharing, consultation, exercise, and capacity building, while promoting measures concerning the development of international norms.

 Chapter 1, Section 3 (Responses in the Domains of Space, Cyberspace and Electromagnetic Spectrum), p. 278

1 Cooperation in Use of Space Domain

Regarding the use of the space domain, Japan will promote partnership and cooperation in various fields including Space Situational Awareness (SSA) and mission assurance of the entire space system, through consultations and information sharing with relevant countries and active participation in multilateral exercises among others.


The MOD/SDF has taken part in the annual SSA multinational tabletop exercise (Global Sentinel) and the Schriever Wargame, hosted by the U.S. Forces and is working to share the recognition of threats in space among multiple countries and acquire knowledge related to cooperation regarding SSA and mission assurance of the space system.

In addition, Japan and the United States signed a memorandum in December 2020 to carry two U.S.-made payloads on Japan's Quasi-Zenith Satellite System.

The MOD/SDF is also working on cooperation with countries other than the United States. For example, the Japan-Australia Space Security Dialogue and Japan-U.S.-Australia Space Security Dialogue are held to exchange opinions on space policy. With France, based on the agreement to strengthen bilateral dialogue on

space domain at the Japan-France Foreign and Defense Ministers' Meeting in March 2015, the two countries decided to start the Japan-France Comprehensive Space Dialogue. At the 2nd Japan-France Comprehensive Space Dialogue in March 2017, in order to strengthen bilateral cooperation on SSA, the two countries signed a technical arrangement on information sharing pertaining to space situation awareness between the competent authority of Japan and the Minister of Defense of the Republic of France, and agreed to promote specific cooperation initiatives.

With the EU, it was decided to start the Japan-EU Space Policy Dialogue at the Japan-EU summit meeting in May 2014, and four dialogue sessions have been held. At the Japan-India summit meeting in October 2018, the two countries decided to start space dialogue between the governments, and the MOD participated in the first meeting held in March 2019.

 Chapter 2, Section 2 (Strengthening Ability of Japan-U.S. Alliance to Deter and Counter Threats), p. 314
Section 1-2 (Promotion of Defense Cooperation and Exchanges), p. 352

2 Cooperation in Use of Cyber Domain

Regarding the use of the cyber domain, Japan will enhance its partnership and cooperation with relevant countries through measures such as sharing views on threat awareness, exchanging views on response to cyber attacks, and participating in multilateral exercises.

The MOD has held cyber dialogues with the respective defense authorities of Australia, the United Kingdom, Germany, Estonia, and others to exchange views on threat awareness and relevant initiatives taken by each country. With NATO, the MOD carries out initiatives looking at possible future operational cooperation, such as

establishing a cyber dialogue between defense authorities called the Japan-NATO Expert Staff Talks on Cyber Defense and in December 2019, officially participating for the first time in the cyber defense exercise "Cyber Coalition 2019" hosted by NATO, in which Japan had participated as an observer.

Furthermore, Japan has participated in the International Conference on Cyber Conflict (CyCon) which is organized by the CCDCOE based in Estonia. The MOD is further developing collaborative relationships with NATO in the cyber domain through the dispatch of

personnel to the Centre since March 2019. In addition, having previously participated as an observer, in April 2021 Japan officially participated for the first time in the “Locked Shields 2021” cyber defense exercise organized by the CCDCOE.

In addition, IT Forums have been held between the defense authorities of Singapore, Vietnam, and Indonesia to exchange views on initiatives in the information communications area including cybersecurity and current

trends in technology. The MOD has been expanding the cooperation by implementing cybersecurity human resource development seminars for Vietnamese Forces as part of its capacity building in December 2017, March and August 2019, and January 2020.



Section 1-2 (Promotion of Defense Cooperation and Exchanges), p. 352


Section 1-4 (Proactive and Strategic Initiatives for Capacity Building), p. 388

Section 4 Initiatives for Arms Control, Disarmament and Non-Proliferation

The proliferation of weapons of mass destruction (WMDs) and missiles that can deliver them, as well as the proliferation of not only conventional arms but also goods and sensitive technologies of potential military use, pose a pressing challenge to the peace and stability of the international community. Moreover, many countries are working on the regulation of certain conventional weapons, considering the need to maintain a balance

between humanitarian perspectives and defensive needs.

In order to deal with these issues, the international frameworks for arms control, disarmament, and nonproliferation has been developed under which Japan has played an active role.

 Fig. III-3-4-1 (Framework for Arms Control, Disarmament and Non-Proliferation Relating to Conventional Weapons, Weapons of Mass Destruction, Missiles and Related Materials, etc.)

1 Initiatives Focused on Treaties Relating to Arms Control, Disarmament, and Non-Proliferation

Japan actively participates in international initiatives for arms control, disarmament, and non-proliferation in regard to WMDs, in the form of nuclear, chemical, and biological weapons, as well as missiles that can deliver them, and associated technologies and materials.

Japan has contributed to the Chemical Weapons Convention (CWC) by offering its knowledge in the field of chemical protection since the negotiating stage and dispatching GSDF personnel who are experts on protection against chemical weapons to the Organisation for the Prohibition of Chemical Weapons (OPCW), which was established to continuously implement verification measures following the entry of the CWC into force. In addition, small quantities of the chemical substances under the regulation of the CWC are synthesized at the GSDF Chemical School (Saitama City), in order to conduct protection research. Thus, the school has undergone inspections 11 times in total since the establishment of

the OPCW, in accordance with the CWC regulations.

Moreover, the whole of the Japanese Government is also working on projects aimed at disposing of abandoned chemical weapons in China, in accordance with the CWC. The MOD/SDF has seconded GSDF and other personnel to the Cabinet Office to be charge of this project, and since 2000, GSDF personnel with expertise in chemicals and ammunitions have been dispatched to conduct excavation and recovery projects on a total of 19 occasions.

In addition, the MOD has been cooperating in endeavors aimed at increasing the effectiveness of regulations and decisions, by dispatching MOD officials to major meetings such as those of the Biological Weapons Convention (BWC), as well as international export control regimes in the form of the Australia Group (AG) and the Missile Technology Control Regime (MTCR). At the same time, SDF personnel were dispatched to training to foster surrogate inspectors¹ provided by the Preparatory

Fig. III-3-4-1

Framework for Arms Control, Disarmament and Non-Proliferation Relating to Conventional Weapons, Weapons of Mass Destruction, Missiles and Related Materials, etc.

Category	Weapons of Mass Destruction, etc.				Conventional Weapons
	Nuclear Weapons	Chemical Weapons	Biological Weapons	Delivery Systems (Missiles)	
Conventions on Arms Control, Disarmament and Non-Proliferation, etc.	Treaty on the Non-Proliferation of Nuclear Weapons (NPT) Comprehensive Nuclear-Test-Ban Treaty (CTBT)	Chemical Weapons Convention (CWC)	Biological Weapons Convention (BWC)	The Hague Code of Conduct Against Ballistic Missile Proliferation (HCCO)	Convention on Certain Conventional Weapons (CCW) Convention on Cluster Munitions (Oslo Convention) Anti-Personnel Mine Ban Convention (Ottawa Treaty) U.N. Register of Conventional Arms U.N. Report on Military Expenditures Arms Trade Treaty (ATT)
Export Control Frameworks Aimed at Non-Proliferation	Nuclear Suppliers Group (NSG)	Australia Group (AG)		Missile Technology Control Regime (MTCR)	Wassenaar Arrangement (WA)
New International Initiatives Aimed at Non-Proliferation of Weapons of Mass Destruction	Proliferation Security Initiative (PSI) United Nations Security Council Resolution 1540				

¹ Experts in relevant fields registered with the Comprehensive Nuclear-Test-Ban Treaty (CTBT) Organization, in preparation for the implementation of On-site Inspections (OSI) following the effective date of the CTBT. They are also expected to become inspectors who conduct OSI after the CTBT enters into force.



GSDF personnel responding to OPCW inspections (December 2020)

Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO).

 **See** Reference 47 (Dispatch of Ministry of Defense Personnel to International Organizations)

Japan has signed various conventions on the regulation of conventional weapons such as the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (CCW), based on humanitarian perspectives and security needs. In addition, Japan has signed the Convention on Cluster Munitions (Oslo Convention),² which was

adopted outside the framework of the CCW. With the entry of this Convention, the disposal of all cluster munitions possessed by the SDF was completed in February 2015.

The Ministry dispatches personnel to Group of Governmental Experts meetings related to Lethal Autonomous Weapons Systems (LAWS) and other events as necessary under the CCW framework. Discussions related to LAWS are under way from the perspectives of their characteristics, human-machine interactions, international law, and other matters. Japan is continuing its active involvement in the discussions, while also considering the standpoints of national security.

Furthermore, the MOD has actively cooperated in the initiatives of the international community that focus on the prohibition of anti-personnel mines by submitting annual reports that include data on Japan's exceptional stocks to the Secretariat of the Convention on the Prohibition of Anti-Personnel Mines.

In addition, the MOD/SDF provides an annual report under the frameworks of the UN Register of Conventional Arms, the UN Report on Military Expenditures and Arms Trade Treaty (ATT), which aim to increase the transparency of the military preparedness and military expenditure. It also dispatches personnel as needed to governmental expert meetings and other meetings for reviewing and improving these systems.

2 International Initiatives Aimed at Non-Proliferation of Weapons of Mass Destruction

Deeply concerned about the development of WMDs and missiles by countries such as North Korea and Iran, the United States announced its Proliferation Security Initiative (PSI)³ in May 2003, and sought the participation of other countries therein. Various initiatives are being undertaken based on PSI; PSI interdiction exercises aimed at improving the ability to thwart the proliferation of WMDs and related items and meetings to consider issues on policies and legislations.

Since the 3rd PSI Meeting in Paris (September 2003), the MOD/SDF has collaborated with relevant organizations and countries, dispatching MOD officials and SDF personnel to various meetings, as well as engaging in ongoing participation in these exercises since 2004.

The MOD/SDF has participated in PSI maritime interdiction exercises, hosted by Japan, thrice, working in partnership with relevant organizations such as the MOFA, the National Police Agency, the Ministry of

Finance and the Japan Coast Guard, and also participated in the PSI air interdiction exercise in July 2012, which Japan hosted for the first time. Japan organized Pacific Shield 18, a PSI maritime prevention exercise, in July 2018, to carry out training in activities to prevent the spread of WMDs with Australia, New Zealand, the ROK, Singapore, and the United States.

Based on the proliferation cases in the areas surrounding Japan, and from the perspectives of preventing the proliferation of WMDs and improving the response capability of the SDF, the MOD/SDF strives to strengthen nonproliferation frameworks including PSI, as well as holding various relevant exercises and meetings and participating in the same kind of activities which other countries hold.

 **See** Fig. III-3-4-2 (Participation of MOD/SDF in PSI Interdiction Exercise [Since FY2012])

² Major producers and owners of cluster munitions such as the United States, China and Russia have not signed the Oslo Convention.

³ An initiative that seeks to strengthen the relevant domestic laws of respective countries to the maximum possible extent, and considers measures that participating countries can jointly take while complying with existing domestic and international laws, in order to prevent the proliferation of WMDs and related materials.

Fig. III-3-4-2 Participation of MOD/SDF in PSI Interdiction Exercise (Since FY2012)

Date	Exercise	Location	Participation of the MOD/SDF
July 2012	PSI air interdiction exercise hosted by Japan	Japan	Joint Staff, Ground Staff, Air Staff, Air Defense Command, Air Support Command, Northern Army, Central Readiness Force, GSDF Seventh Chemical Weapon Defense Unit and Central Nuclear Biological Chemical Weapon Defense Unit, Internal Bureau (including two aircraft)
September 2012	PSI maritime interdiction exercise hosted by the ROK	ROK	Joint Staff, Maritime Staff, Internal Bureau (including one ship and one aircraft)
February 2013	PSI exercise co-hosted by the U.S. and UAE	UAE	Dispatch of observer (Joint Staff)
August 2014	PSI maritime interdiction exercise hosted by the United States	United States	Joint Staff (including one ship)
November 2015	PSI interdiction exercise hosted by New Zealand	New Zealand	Joint Staff
September 2016	PSI maritime interdiction exercise hosted by Singapore	Singapore	Joint Staff
September 2017	PSI maritime interdiction exercise hosted by Australia	Australia	Joint Staff, Ground Staff, Maritime Staff, Internal Bureau (including one aircraft)
July 2018	PSI maritime interdiction exercise hosted by Japan	Japan	Joint Staff, Ground Defense Command, Self Defense Fleet, Eastern Army, Yokosuka Regional Unit, Chemical School, Internal Bureau (including two vessels, two aircraft and three vehicles)
July 2019	PSI interdiction exercise hosted by ROK	ROK	Joint Staff and Chemical School

Section 5

Efforts to Support International Peace Cooperation Activities

The MOD/SDF has been proactively undertaking international peace cooperation activities working in tandem with diplomatic initiatives, including the use

of the Official Development Assistance (ODA) for resolving the fundamental causes of conflicts, terrorism and other problems.

1 Frameworks for International Peace Cooperation Activities

1 Framework of International Peace Cooperation Activities and Background to Stipulating Such Activities as One of the Primary Missions of the SDF

The international peace cooperation activities undertaken by the MOD/SDF to date are as follows: (1) international peace cooperation assignments such as UN peacekeeping operations (UN PKO); (2) international disaster relief activities to respond to large-scale natural disasters overseas; (3) activities based on the former Special Measures Act on Humanitarian Reconstruction Assistance in Iraq; and (4) activities based on the former Anti-Terrorism Special Measures Act, and the former Replenishment Support Special Measures Act.

In 2007, international peace cooperation activities, which used to be regarded as supplementary activities,¹ were upgraded to become one of the primary missions of the SDF,² alongside the defense of Japan and the maintenance of public order. In March 2016, the Legislation for Peace and Security was enforced, which allows cooperation and support operations in response to situations threatening the international peace and security that the international community is collectively addressing based on general laws without establishing a special measures act.

See Part II, Chapter 5 (Framework for Activities of the SDF and Others), p. 235
Chapter 1, Section 5 (SDF Activities since Enforcement of Legislation for Peace and Security), p. 300
Fig. III-3-5-1 (International Peace Cooperation Activities Conducted by the SDF)
Reference 10 (Conditions Required for Main Operations of the Self-Defense Forces [Including Diet Approval] and Authority for the Use of Weapons Concerning Main Operations of the Self-Defense Forces)
Reference 48 (Summary Comparison of Laws Concerning International Peace Cooperation Activities)
Reference 49 (The SDF Record in International Peace Cooperation Activities)

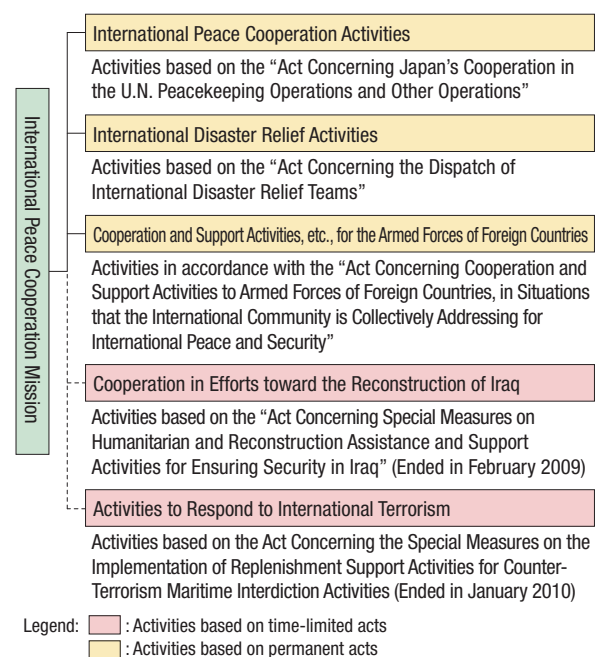
2 Continuous Initiatives to Promptly and Accurately Carry Out International Peace Cooperation Activities

To be a proactive contributor to world peace, it is important for the SDF to be fully prepared for any future operations. For this reason, all the three branches of the SDF, namely the GSDF, MSDF and ASDF, designate dispatch stand-by units and always maintain a state of readiness.

In September 2015, the UN launched the Peacekeeping Capability Readiness System (PCRS) to enable the UN Headquarters to grasp PKO dispatch preparation status of each country more specifically in order to ensure the flexibility and readiness of international peacekeeping activities. In light of this change, Japan registered engineering units and staff officers of mission headquarters in March 2016. Also, in May 2020, Japan additionally registered C-2 and C-130H transport

Fig. III-3-5-1

International Peace Cooperation Activities Conducted by the SDF



¹ Affairs prescribed in Article 8 of the SDF Law (miscellaneous provision) or supplementary provisions

² Missions defined in Article 3 of the SDF Law. The primary mission is to defend Japan. The secondary missions are the preservation of public order, activities in response to situations in areas surrounding Japan (in 2007), and international peace cooperation activities. In accordance with the entry into force of the Legislation for Peace and Security in 2016, "situations in areas surrounding Japan" was revised to "situations that will have an important influence on Japan's peace and security."

aircraft for PCRS to enable air transport assistance for rapid PKO deployment.

Meanwhile, the SDF is enhancing information-gathering abilities and protection abilities, which are required for the SDF units to carry out their missions while ensuring the safety of personnel and units in international peace cooperation activities, etc. In addition, in order to respond to various environments and prolonged missions, the SDF is improving its capabilities for transport, deployment, and information communication, as well as developing a structure of logistic and medical support for conducting smooth and continuous operations.


With regard to the education necessary for engaging in international peace cooperation activities, the GSDF International Peace Cooperation Activities Training Unit, which belongs to the Ground Component Command, provides training for GSDF personnel to be deployed to international peace cooperation activities, as well as supports their training. In addition, the Japan Peacekeeping Training and Research Center (JPC) of the Joint Staff College offers not only basic education courses on international peace cooperation activities, but also specialized education to train personnel who can be appointed as contingent commanders of UN PKO missions and staff officers of mission headquarters. These specialized courses are conducted by using UN standard training materials and foreign instructors.

Furthermore, since FY2014, the JPC has also provided education for personnel from foreign militaries and other Japanese ministries and agencies. This initiative

represents the approach taken by the MOD/SDF, which emphasizes the necessity of collaboration and cooperation with other related ministries and foreign countries, based on the current situation of more multi-dimensional and complicated international peace cooperation activities. The initiative aims to contribute to more effective international peace cooperation activities by enhancing collaboration in the field of education.

3 Welfare and Mental Health Measures for Dispatched SDF Units

The MOD/SDF is implementing various family support and mental health support measures for dispatched SDF personnel and their families to alleviate any anxieties they may go through during the dispatch. For example, depending on the characteristics of the duties of the unit to be dispatched, the MOD/SDF provides SDF personnel with necessary measures such as the following: (1) education before the dispatch on necessary knowledge on how to reduce stress; (2) mental health check before, during, and after the dispatch; (3) counseling on anxieties and concerns during the dispatch, conducted by staffs specially trained for carrying out mental health care; (4) dispatch of a mental health care team including a medical officer with expertise on mental health care; (5) stress reduction education upon returning to Japan; and (6) medical checkup after returning to Japan.

 See Part IV, Chapter 1, Section 1-3 (Measures Aimed at Ensuring Effective Use of Human Resources), p. 419

2 Initiatives to Support UN PKO, etc.

As a means to promote peace and stability in conflict regions around the world, UN PKO have expanded their missions in recent years to include such duties as the Protection of Civilians (POC), the promotion of political processes, providing assistance in Disarmament, Demobilization and Reintegration (DDR) into society of former soldiers, Security Sector Reform (SSR), the rule of law, elections, human rights, and other fields, in addition to such traditional missions as ceasefire monitoring. To date, there are 12 UN PKO missions ongoing (as of the end of March 2021).

International organizations, such as the Office of the UN High Commissioner for Refugees (UNHCR), respective governments, and NGO conduct relief and restoration activities for the victims of conflicts and large-scale disasters from a humanitarian perspective and from the viewpoint of stabilizing affected countries.

Japan has been promoting international peace

cooperation activities in various regions, including Cambodia, the Golan Heights, Timor-Leste, Nepal, and South Sudan for more than 25 years, and the results of these activities have been highly praised both inside and outside of Japan.

In addition to continuous dispatch of staff officers to UNMISS, Japan is able to participate in Internationally Coordinated Operations for Peace and Security along with enforcement of the Legislation for Peace and Security. In April 2019, Japan started to dispatch staff officers to the Multinational Force and Observers (MFO).

Japan will actively contribute to international peace cooperation activities through such activities as dispatch of personnel to mission headquarters and capacity building in Japan's fields of expertise by using accumulated experience so far and working on human resource development.

Fig. III-3-5-2 Outline of MFO Operations and Relevant Maps

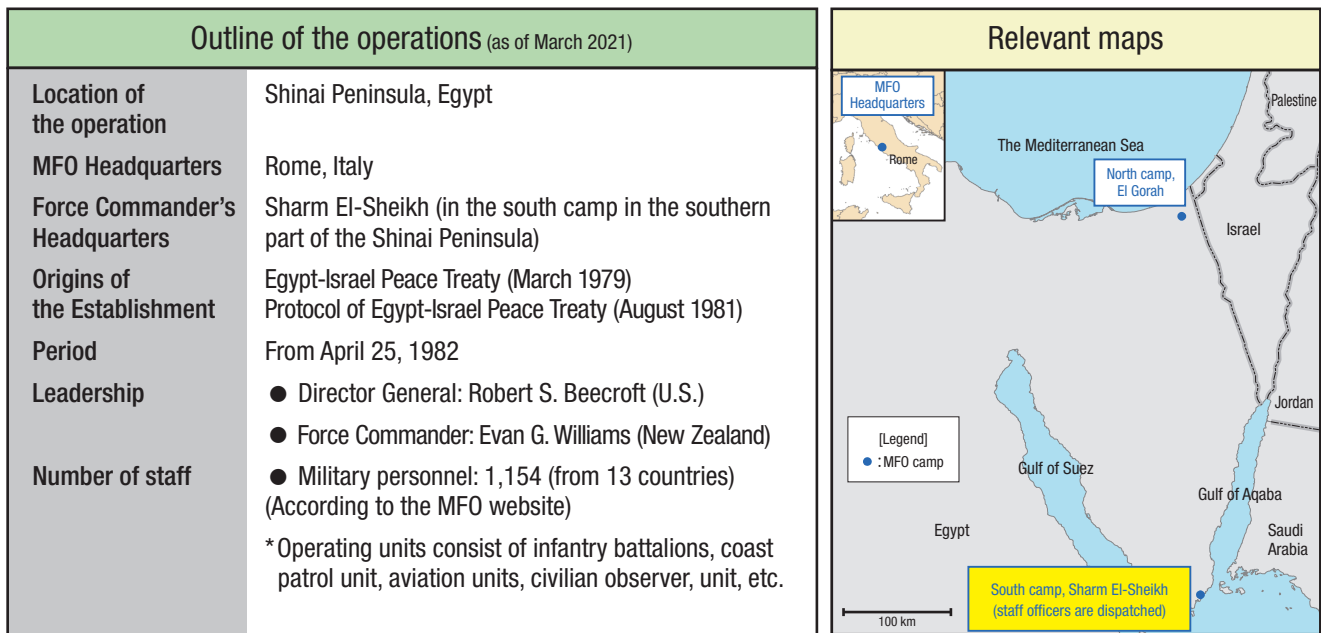
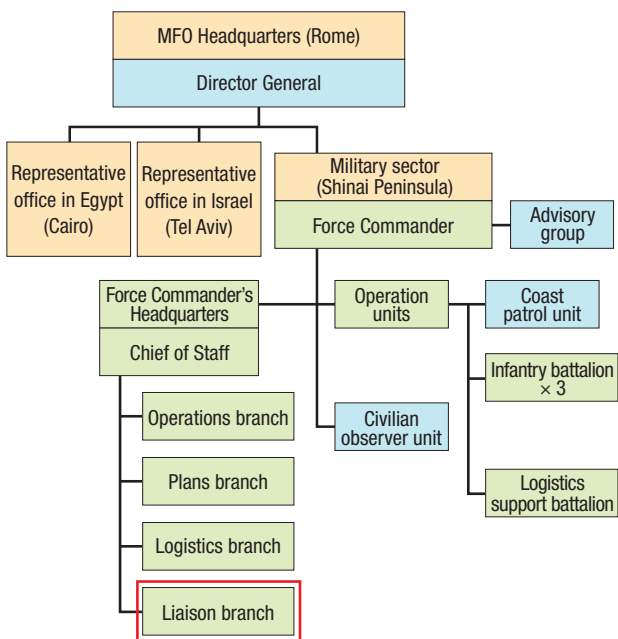


Fig. III-3-5-3 Organizational Chart of MFO



Note: Red line indicates a department/division in which Japanese personnel are placed.



GSDF personal engaging in operations in the MFO (June 2020)

1 Dispatch to the MFO

(1) Significance of Dispatch to the MFO

In August 1981, the MFO was established by the Protocol to the Egypt-Israel Peace Treaty as an organization to undertake the tasks and responsibilities of the UN force and observer mission stipulated in the treaty. Since 1982, when its activities started, by facilitating dialogue and confidence building between Egypt and Israel, the MFO has contributed to peace and stability in the Middle East, which is a foundation of peace and prosperity for Japan.

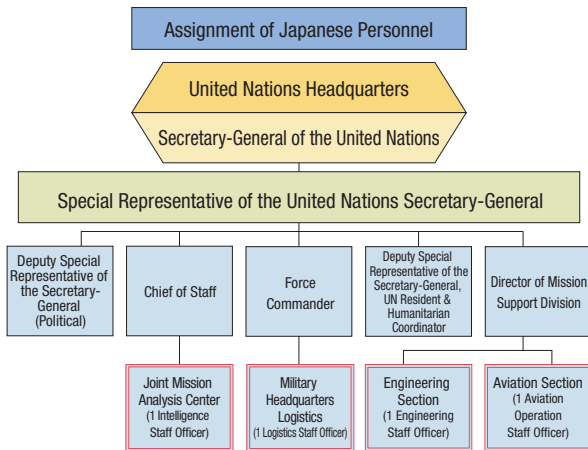
Amidst this, the MFO requested that Japan send staff officers to its headquarters, and, with a view to making proactive contributions to international peace efforts, the Cabinet decided on the implementation of international peace operations in the Sinai Peninsula in April 1982, and dispatched two staff officers to the MFO as Japan's first activity for the purpose.

Chapter 1, Section 5-3 (Other Efforts and Activities, etc.), p. 301

(2) Activities by Staff Officers and Others

The two officers are engaging in liaison and coordination between governments of the two countries or other

Fig. III-3-5-4 Organization of UNMISS



Note: Double lines indicate a department/division in which Japanese personnel are placed.



GSDF personal coordinating duties in the UNMISS (November 2020)

relevant organizations and the MFO as a Deputy Chief of Liaison and an Assistant Liaison Operation Officer at the MFO Headquarters, which is located in the south camp at Sharm El-Sheikh in the southern part of the Sinai Peninsula.

Additionally, in order to help the two officers dispatched to the MFO carry out activities smoothly and effectively, one liaison and coordination personnel is dispatched to Cairo city, Egypt, to liaise and coordinate with the relevant organizations in the dispatched country.

These activities express Japan's commitment to more active involvement in the peace and stability of the Middle East. It is also expected to promote collaboration with the other countries dispatching officers, including the United States, and create new opportunities for human resource development.

Fig. III-3-5-2 (Outline of MFO Operations and Relevant Maps)
Fig. III-3-5-3 (Organizational Chart of MFO)

2 UNMISS

(1) Significance of the Dispatch of Personnel to UNMISS

In July 2011 following South Sudan's independence, with the objective of consolidating peace and security as well as helping establish necessary conditions for the development of South Sudan, the UNMISS was established. Japan was requested by the UN to cooperate with UNMISS, particularly through the dispatch of GSDF engineering units. The Cabinet approved the dispatch of two staff officers (logistics and database officers) to UNMISS in November 2011, and in December it decided to dispatch an SDF engineering unit, Coordination Center, and an additional staff officer (engineering officer). In addition, the Cabinet also approved the dispatch of one staff officer (air operations officer) in October 2014.

South Sudan shares borders with six countries and

is positioned in a highly important location, connecting the African continent on all four points of the compass. The peace and stability of South Sudan is not only essential for the country itself; but also for the peace and stability in its neighboring countries, and by extension, Africa as a whole, as well as a crucial issue that should be dealt with by the international community. Based on the accumulated experience through past PKO, the MOD/SDF has contributed to the peace and stability of South Sudan by providing personnel-based cooperation in infrastructure development, on which the UN places great expectations.

Part I, Chapter 2, Section 10-9 (Situation in South Sudan), p. 167

(2) Activities by Dispatched Engineering Units

Since the commencement of its engineering activities within UN facilities in Juba in March 2012, the dispatched engineering unit has steadily expanded its activities. The SDF has continued to dispatch over 300 personnel after the second unit took over, and carried out activities with great significance, such as repairing roads and constructing facilities for displaced people while ensuring the safety of the personnel.

Japan could move on to a new phase regarding engineering activities in Juba that the SDF was in charge of. Considering the above-mentioned issues in a comprehensive manner, in March 2017, the Government of Japan came to the conclusion that the SDF engineering unit would withdraw from Juba around the end of May 2017. SDF personnel engaged in withdrawal work, then sequentially withdrew from South Sudan, and terminated the operations by the engineering unit in UNMISS. At the conclusion of their activities, the dispatched engineering units repaired a total of approximately 260 km of roads and developed a total of approximately 500,000 m², etc.,

VOICE

Voice of a Female Officer Deployed to UNMISS Command Center

**Captain NAKABAYASHI Yuki, Operations Division,
Ground Component Command, GSDF
(Nerima Ward, Tokyo)**

For one year starting from January 2020, I served as part of the Aviation Operations Staff for the United Nations Mission in South Sudan (UNMISS). My unit was comprised of 110 people from 37 countries, including civilians, military personnel and local staff. I was responsible for producing the daily operating plans for the 27 aircraft deployed to UNMISS, and managing their operation based on the plans. We sometimes faced unexpected challenges such as bad weather, malfunctioning aircraft, or the refusal of airspace permission from the South Sudan government, but I worked together as a team with my superiors and colleagues to overcome these hurdles. Working as a team to address issues such as these provided me with



The author (left) working with a wing commander of the Indian Air Force

great satisfaction in my work. Furthermore, whenever we received a request to perform an emergency airlift of a patient, we responded with the utmost urgency. Swift and accurate arrangements with the relevant departments and a rapid take-off are directly connected to saving the patient's life, and I was thrilled and felt a great sense of accomplishment when we received words of gratitude from those involved after the patient was safely delivered to the hospital via airlift.

My one-year deployment in South Sudan took place during the COVID-19 crisis, but I was able to complete my deployment without mishap thanks to my superiors and colleagues on the ground, fellow command staff in my deployment, the members of the South Sudan Embassy, and the many people supporting us from Japan. I would like to take this opportunity to once again express my heartfelt gratitude.



The author (fifth from right) together with colleagues

which are the largest achievements to date in Japan's PKO activities.

In response to a request from the UN to transfer items possessed by the dispatched engineering unit such as heavy machinery, vehicles, and residence-related containers, Japan transferred these items to UNMISS with no charge, intending to make Japan's cooperation with UNMISS more effective. Prior to this transfer of items, the MOD, responding to a request from UNMISS, provided training on the operation and maintenance of heavy machinery to UNMISS personnel, so that UNMISS would be able to conduct activities in a smooth manner using these heavy machinery and other equipment even after the withdrawal of the Japanese unit.

These dedicated activities by the dispatched engineering unit were highly appreciated and valued by the UN and South Sudan.


(3) Activities by Command Post Staff Officers and Others

Personnel dispatches to the UNMISS headquarters are continuing. Four GSDF members (logistics officer, intelligence officer, engineering officer, and air operations officer) currently carry out duties at the UNMISS headquarters. Specifically, the logistics officer procures and transports goods needed in UNMISS activities, the database officer collects and compiles information on security conditions, the engineering officer plans and proposes UNMISS engineering activities, and the air operations officer creates flight plans, etc., for run by UNMISS.

Additionally, liaison staff members have been dispatched to the liaison office in the Embassy of Japan in South Sudan to support activities of the Japanese staff officers. These people help interactions between the South Sudan government and the International Peace Cooperation Corps in South Sudan with the aim of

ensuring smooth and efficient cooperation with UNMISS.

They will continue to contribute to activities as UNMISS members.

 Chapter 1, Section 5-3 (Other Efforts and Activities, etc.), p. 301
Fig. III-3-5-4 (Organization of UNMISS)

3 Dispatch of MOD Personnel to the UN Secretariat

The MOD/SDF dispatches personnel to the UN Secretariat for the purpose of actively contributing to the UN efforts to achieve international peace and for the purpose of utilizing experiences of dispatched personnel in Japan's PKO activity. As of March 2021, one of the SDF personnel (action officer level) is involved in the formulation of UN PKO policies and plans at the UN Department of Peace Operations (DPO), and one SDF personnel and one administrative official (both action officer level) are working on the United Nations Triangular Partnership Project (UNTPP)³ at the UN Department of Operational Support (DOS).

In addition, since December 2002, including personnel currently dispatched, Japan has sent seven SDF personnel (one director level, six action officer level) to the UN DPO and four SDF personnel and administrative officials (all action officer level) to the UN DOS.

 Reference 47 (Dispatch of Ministry of Defense Personnel to International Organizations)

4 Dispatch of Instructors to PKO Training Centers

To support PKO undertaken by African and other countries, the MOD/SDF has dispatched SDF personnel as instructors to PKO training centers in Africa and other countries that provide education and training for UN peacekeepers to contribute to peace and stability by enhancing the capacity of the centers.

 Reference 47 (Dispatch of Ministry of Defense Personnel to International Organizations)

5 Support to the UNTPP

Japan has so far earned unquestionable trust in the areas of engineering and transport that are essential for promoting smooth peacekeeping operations. To continue to support the rapid deployment of peacekeeping missions and implement high quality activities, Japan expressed its active support at the PKO Summit in September 2014, and it was embodied by the UNTPP.

The UNTPP was founded using funds from Japan as a project to support training for military engineers and the procurement of heavy equipment by the UN DOS. Japan has been dispatching SDF personnel to the International Peace Support Training Centre (IPSTC) in Nairobi, Kenya, as trainers since the pilot training in September 2015. At the IPSTC, the SDF personnel efficiently provided training on engineering equipment for trainees from forces of African countries from June to October 2018 according to their level of engineering equipment skills.

Two training sessions on the operation and maintenance of heavy equipment were provided for the Ugandan Army's engineers from August to November 2019. This was the first training session held at the Uganda Rapid Deployment Capability Centre. From the start of the project to March 2021, a total of 164 GSDF officers have been dispatched to Africa to provide nine training sessions for a total of 277 members from eight African countries.

Considering that 30% or more of PKO personnel are from Asia, Japan decided to implement the project for the first time in Asia and the surrounding regions. The project provides training on heavy engineering piloting for engineering personnel. Since a 2018 trial training, GSDF personnel have been dispatched as trainers to Vietnamese military garrisons in Hanoi, and from October to December 2019 they conducted engineering equipment training for the Vietnamese engineering personnel at the garrisons. In addition, from February to March 2020, Training-of-Trainers (ToT) for engineering equipment was conducted for military personnel from several Asian countries. From the start of the project until March 2021, a total of 66 SDF personnel were dispatched to Vietnam and 56 personnel from in and around Asia were trained for a total of three times.

In addition, the UN decided to extend the scope of support under this project to the field of sanitation, given that strengthening sanitation capacity to ensure the safety of deployed personnel has become an issue in UN peacekeeping operations. In response, the UN Field Medical Assistant Course (UNFMAC), which aims to train personnel who can provide first aid before medics or medical personnel provide specialized treatment in areas of PKO operations, was implemented in October 2019. In the course, eight instructors, including two GSDF officers, trained 29 personnel at the UN Regional Service Centre Entebbe in Uganda.

³ Acronym for the United Nations Triangular Partnership Project. A partnership for supporting the capability building of the personnel from UN PKO troop contributing countries through cooperation among the UN, PKO troop contributing countries (TCCs), and supporting member states that possess technologies and equipment.

VOICE

Voice of an Officer Contributing to the UN Triangular Partnership Project (UNTPP)

**Lieutenant Colonel KAWASAKI Machiko,
UN/DOS Medical Training Officer
(New York, United States)**

I have been dispatched to the United Nations Department of Operational Support (UN/DOS) since August 2020, where I am responsible for planning and coordinating the Triangular Partnership Project (UNTPP), in particular medical trainings.

The environment surrounding UN Peacekeeping Operations (PKOs) has become more severe in recent years, and PKO missions face more than 100 PKO fatalities every year. This makes securing the safety of UN personnel an urgent issue. In light of these circumstances, the United Nations Field Medical Assistant Course (UNFMAC) was established in 2019, and instructors have been dispatched from Japan, Europe and North America to provide medical instruction and training to

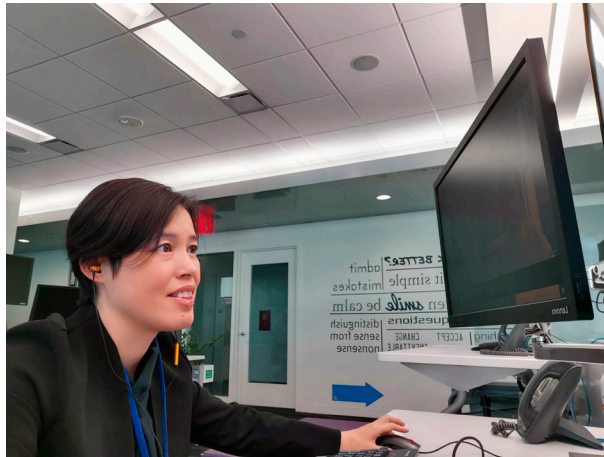
personnel deployed to PKOs.

From early 2020, we faced the global outbreak of the COVID-19 virus, which forced the cancellation of our training and other planned activities. Despite this, there were many requests from PKO missions for trainings on measures to prevent COVID-19 infections, and we have thus taken on the urgent duty of making educational materials. Many people have given their support in the making of these materials, and I feel rewarded as I work on the front lines of this global crisis for the PKO missions.

Currently, I am working with my colleagues to prepare for the resumption of training as soon as possible, arrange the involvement of new supporting nations and develop new training courses online. I will continue giving my all to help resolve the challenges facing UN PKOs in any way possible.



The author in front of the United Nations Headquarters



The author participating in an online meeting with colleagues

6 Revision of the UN Peacekeeping Missions Military Engineer Unit Manual

In order to play a more leading role in international peace cooperation activities, the MOD/SDF served as the chair of the working group on the engineer unit manual since 2013 with the aim of supporting the development of UN Military Unit Manuals⁴ and contributed to the completion of the manual.

The UN asked Japan to serve as the chair of the working group again for revision of the manual. For

the MOD/SDF this is a meaningful opportunity to make contributions by using the experiences and capabilities acquired through the past PKO and other missions. Therefore the MOD/SDF decided to serve as the chair to handle the revision of the manual. The first expert meeting was held in Tokyo in December 2018. Since then, a total of four expert meetings have been held to complete the revision process, and the revised Military Engineer Unit Manual was submitted to the UN in July 2019.


The MOD/SDF will support for the dissemination of the manual.

⁴ With the aim of defining the capacity expected of PKO units and promoting understanding by the participating states, the UN has arranged manuals that prescribe the purpose, capacity and missions for each of ten fields: engineering, military police, aviation, maritime, riverine, signals, special forces, transport, logistics and Force Headquarters (FHQ) support.

3 International Disaster Relief Activities


In recent years, the role of military affairs has become more diverse, and opportunities for military to use their capabilities in HA/DR are growing. To contribute to the advancement of international cooperation, the SDF has also engaged in international disaster relief activities proactively from the viewpoint of humanitarian contributions and improvement of the global security environment.

To this end, the SDF maintains its readiness to take any necessary actions based on prepared disaster relief operation plans. In consultation with the Minister of Foreign Affairs, the SDF has been proactively conducting international disaster relief activities, which fully utilize its functions and capabilities, while taking into consideration specific relief requests by the governments of affected countries and disaster situations in these countries.

 See Reference 49 (The SDF Record in International Peace Cooperation Activities)

1 Outline of the Japan Disaster Relief Team Law

Since the enactment of the Law Concerning the Dispatch of the Japan Disaster Relief Team (Japan Disaster Relief Team Law) in 1987, Japan has engaged in international disaster relief activities in response to requests from the governments of affected countries and international organizations. In 1992, the Japan Disaster Relief Team Law was partially amended, enabling the SDF to participate in international disaster relief activities and to transport its personnel and equipment for this purpose.

 See Reference 10 (Conditions Required for Main Operations of the Self-Defense Forces [Including Diet Approval] and Authority for the Use of Weapons Concerning Main Operations of the Self-Defense Forces)

2 International Disaster Relief Activities by the SDF and SDF's Posture

Responding to specific relief requests by the governments of affected countries and the scale of disaster situations in these countries, the SDF's capabilities in international disaster relief activities encompass (1) medical services, such as first-aid medical treatment and epidemic prevention; (2) transport of relief items, patients and personnel by helicopter and other means; and (3) water supply activities using water-purifying devices. In addition, the SDF uses transport aircraft and ships to carry disaster relief personnel and equipment to the affected area.

The Ground Component Command regional units of the GSDF and other relevant GSDF units maintain their readiness to ensure that they can carry out international disaster relief activities in an independent manner anytime when needed. The Self Defense Fleet of the MSDF and Air Support Command of the ASDF also constantly maintain their readiness to transport personnel and their supplies to disaster affected areas. Furthermore, in April 2015, the MOD/SDF also improved its readiness to be able to swiftly respond to a request for search activities using MSDF fixed-wing patrol aircraft.

Part IV

**Core Elements
Comprising Defense
Capability, etc.**

Chapter 1

Enhancement of Human Resource Base and Medical Functions

Chapter 2

Measures on Defense Equipment and Technology

Chapter 3

Enhancing Intelligence Capabilities

Chapter 4

**Self-Defense Forces Maintaining and Improving High Level
of Proficiency through Training and Exercises**

Chapter 5

**Initiatives to Live in Harmony with Regional Society and
the Environment**

Enhancement of Human Resource Base and Medical Functions

Section 1

Reinforcing Human Resource Base

The National Defense Program Guidelines for FY2019 and beyond (NDPG) specifies that the core element of defense capability is Self-Defense Forces (SDF) personnel, and that securing human resources for SDF personnel and improving their ability and morale are essential to strengthening defense capability. This has become an imminent challenge in the face of shrinking

and aging population with declining birth rates. Also in light of the sustainability and resilience of defense capability, the SDF needs to work even further to reinforce the human resource base.

SDF's measures to reinforce the human resource base including those taken so far are explained below.

1 Recruitment and Employment

1 Recruitment

It is vital to secure highly qualified personnel for the Ministry of Defense (MOD)/SDF to carry out various missions appropriately. Expectations from the public for the MOD/SDF have continued to rise. In Japan, however, due to the recent economic and employment upturn, as well as the advancement of declining birthrate and popularization of higher education, the environment surrounding the employment of uniformed SDF personnel is severe. In such a situation, it is necessary for the MOD/SDF to recruit qualified human resources with a strong desire to join the SDF, by sufficiently explaining to them the missions, roles, duties, welfare programs, and

privileges of the SDF.

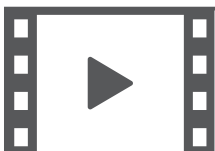
For this reason, the MOD/SDF maintains Provincial Cooperation Offices in 50 locations throughout Japan to recruit and employ SDF personnel, attentively and perseveringly obtaining cooperation from local governments, schools, recruitment counselors, and others in a severe recruitment environment. Moreover, local governments will carry out some of the administrative activities regarding the recruitment of uniformed SDF personnel and candidates for uniformed SDF personnel, including announcing the recruitment period and promoting the SDF as a workplace, with the MOD bearing the requisite cost. At the same time, the MOD is strengthening collaboration with local governments



Briefing session by Provincial Cooperation Office Director

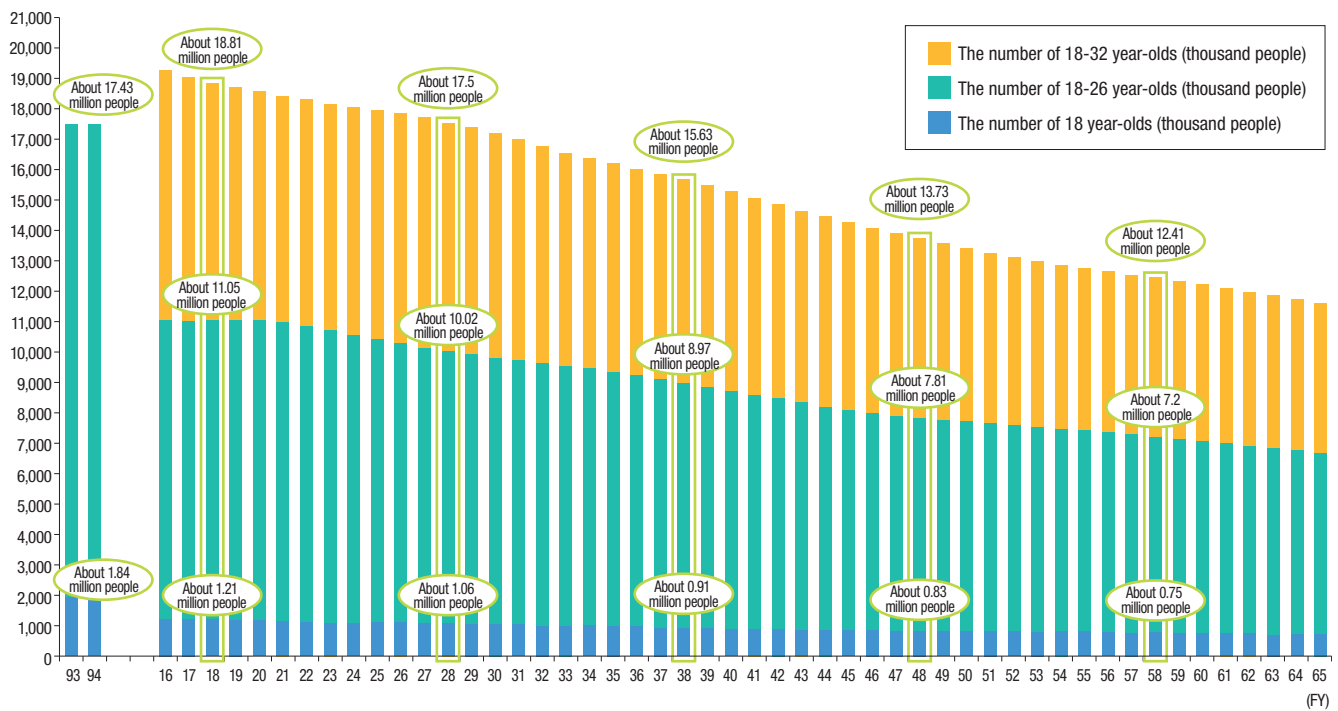


Online briefing session for high school students



Video: Advertisement for Recruitment of Uniformed SDF Personnel
URL: https://www.youtube.com/watch?v=Jtxwcm_YCCo

Fig. IV-1-1-1 Changes in the Number of People Eligible to Join the SDF



Material sources: The numbers for FY1993 and FY1994 are based on "Population Estimates of Japan 1920 - 2000" and "Current Population Estimates," Statistics Bureau, Ministry of Internal Affairs and Communications. Data from FY2016 onward are based on "Population Projection for Japan" (medium estimates in April 2017), National Institute of Population and Social Security Research.

to ensure necessary cooperation including information provision on recruitment targets, which is indispensable for smooth administrative activities regarding the recruitment.

2 Employment

(1) Uniformed SDF Personnel

Based on a voluntary system that respects individuals' free will, uniformed SDF personnel are recruited under various categories. The upper age limit of general candidate for enlistment (Upper) and candidates for uniformed SDF personnel was raised from "under 27" to "under 33" in 2018 in order to secure diverse human resources from a broader range, including people with work experience in private companies.

Moreover, a review of the examination for candidates for uniformed SDF personnel was conducted in 2020 in order to ensure improvement of the quality of the uniformed SDF personnel in fixed-term system (candidate for uniformed SDF personnel) while securing human resources with diverse backgrounds and capabilities.

See Fig. IV-1-1-1 (Changes in the Number of People Eligible to Join the SDF)

See Fig. IV-1-1-2 (Overview of Appointment System for SDF Personnel)

Personnel management of uniformed SDF personnel differs from that of general civilian government employees,¹ due to the uniqueness of their duties and the need to maintain the SDF's strength. With consideration

given to the knowledge, experience, physical strength and other factors necessary for the duties of the respective ranks, the SDF has "Early Retirement System" where the majority of personnel retire in their mid-50s and "Fixed Term System" where one term is two or three years.

After employment, uniformed SDF personnel are assigned their branch of service and duties at units all around Japan, in accordance with their choice or aptitude, following basic education and training at respective training units or schools of respective SDF services.

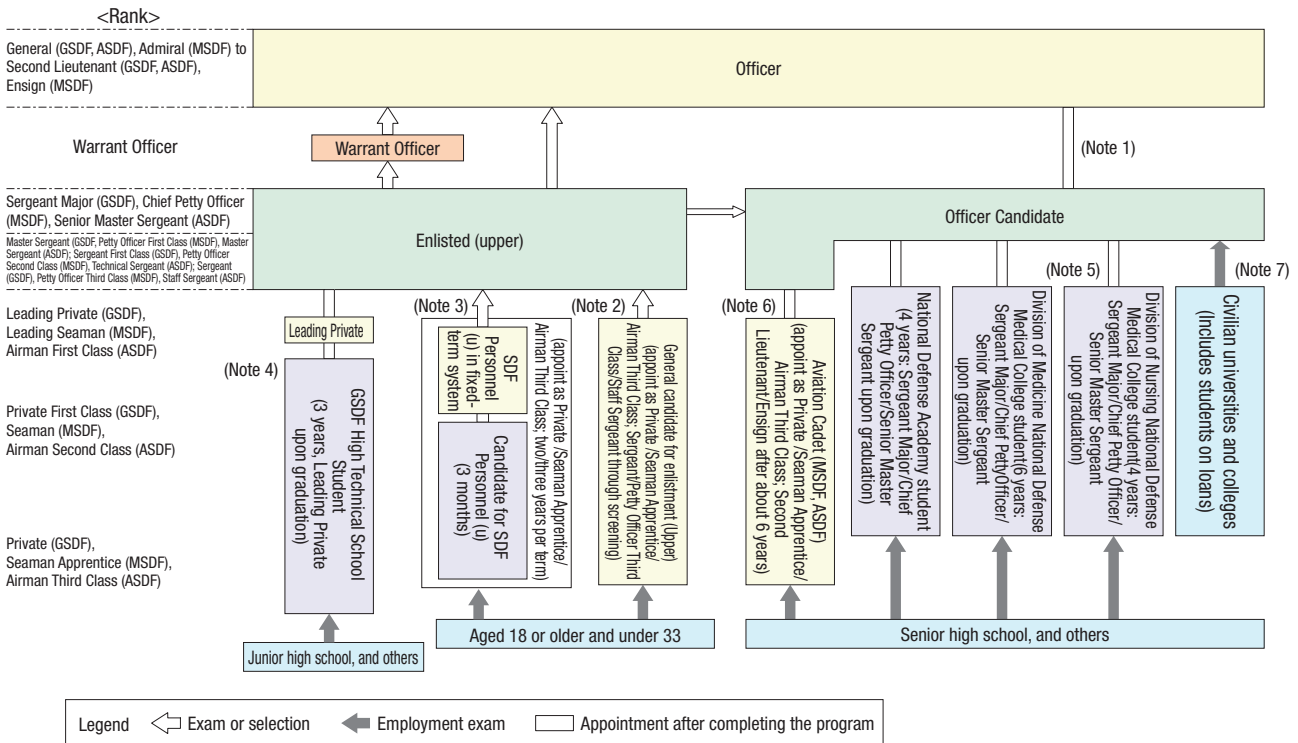
See Reference 50 (Authorized and Actual Strength of Uniformed SDF Personnel and Changes in Them)
Reference 51 (Status of Application and Recruitment of Uniformed SDF Personnel [FY2020])



New members of the GSD attending induction ceremony

¹ SDF personnel are designated as special national government employees under Article 2 of the National Civil Service Law.

Fig. IV-1-1-2 Overview of Appointment System for SDF Personnel




- Notes: 1. Staff candidates for the medicine, dentistry, and pharmacy faculties will be promoted to the position of First Lieutenant if they pass the national examinations in medicine and complete the prescribed education and training.
2. General candidate for enlistment (upper) refers to a candidate who has been enlisted with the premise that he/she will be promoted to a fixed-term position of "Enlisted (upper)." Until FY2006, there were two programs consisting of "Student candidates for enlistment (upper)" and "Enlisted (upper) candidates." However, these two programs were reorganized and combined, and since FY2007, candidates have been appointed as "General candidates for enlistment (upper)."
3. As for the candidate for uniformed SDF personnel, in order to enhance the initial education of SDF personnel in fixed-term service, in July 2010, it was decided that their status during the first three months of their enlistment would be as non-SDF personnel, and they would engage exclusively in fundamental education and training as non-regular Ministry of Defense personnel.
4. GSDF High Technical School trains people to be SDF personnel who will be capable not only of operating and making full use of equipment in the GSDF but also of conducting missions in the international community. Starting from FY2010 appointments, the status of the school's students was changed from SDF officer to "students," which is a new non-regular status. New students receive a high school diploma at the conclusion of a student course (three years) through distance learning. From the FY2011 appointments, a new recommendation system was introduced in which those who are considered appropriate to be a GSDF High Technical School student are selected from among the candidates based on the recommendation of the principal of their junior high school etc., in addition to the conventional general examination.
5. A three-year program ended in FY2013. A new four-year program was established at the Division of Nursing, National Defense Medical College, in FY2014.
6. For Aviation Cadets, the Maritime Self-Defense Force selects from persons 18 or above and under 23 in age and the Air Defense Force 18 or above and under 21 in age.
7. For students on loans, the SDF lends school expenses (54,000 yen per month) to students who major in medicine, dentistry, or science and engineering at a university or a graduate school (excluding professional graduate schools) and have an intention to continue serving as SDF personnel after graduation (completion) by taking advantage of academic knowledge in their specialized fields.

Fig. IV-1-1-3 Overview of Systems Related to SDF Reserve Personnel

	SDF Reserve Personnel	SDF Ready Reserve Personnel	Candidate for SDF Reserve Personnel
Basic concept	● Upon the issuance of a defense call-up order or other orders, serve as SDF Personnel	● Serve as SDF Personnel in a pre-designated GSDF unit, as part of the basic framework of defense capability	● Appointed as SDF Reserve Personnel in the GSDF or MSDF upon completion of education and training
Eligibility	● Former SDF Personnel, former SDF Ready Reserve Personnel, former SDF Reserve Personnel	● Former SDF Personnel, former SDF Reserve Personnel	(Common to General and Technical Employment Categories) ● Those with no experience as SDF personnel (including those with less than a year of SDF experience)
Age	● Leading privates and lower SDF Reserve Personnel: 18 to under 55 years old ● Officer, Warrant Officer, Enlisted (Upper): Under the age of two years added to respective retirement age	● Leading privates and lower SDF Ready Reserve Personnel: 18 to under 50 years old ● Officer, Warrant Officer, Enlisted (Upper): Under the age of three years subtracted from respective retirement age	● General: 18 to under 34 years old; Technical: between the age of 18 and under 53 or 55 depending on technical skills possessed
Employment	● Employed by screening, based on application ● Candidate for SDF Reserve Personnel is appointed as SDF Reserve Personnel upon completion of education and training	● Employed by screening, based on application	● General: Employed by examination, based on application ● Technical: Employed by screening, based on application
Rank designation	● Former SDF Personnel: Designated rank at the point of retirement in principle ● Former SDF Reserve Personnel and Former SDF Ready Reserve Personnel: Designated rank at the point of retirement in principle ● Candidate for SDF Reserve Personnel ● General: Private ● Technical: Designated according to skills and length of experience	● Former SDF Personnel: Designated rank at the point of retirement in principle ● Former SDF Reserve Personnel: Designated rank at the point of retirement in principle	● Not designated
Term of service	● Three Years/One term	● Three Years/One term	● General: Within three years ● Technical: Within two years
Education/ Training	● Although the Self-Defense Forces Law designates a maximum of 20 days per year, actual implementation is 5 days per year as a standard	● 30 days per year	● General: 50 days within three years (equivalent to Candidate SDF personnel (private level) course) ● Technical: 10 days within two years (training to serve as SDF Personnel by utilizing their special skills)
Promotion	● Promotion is determined by screening the service record of personnel who have fulfilled the service term (actual serving days)	● Promotion is determined by screening the service record of personnel who have fulfilled the service term (actual serving days)	● Since there is no designated rank, there is no promotion
Benefits, allowances, and other terms	● Training Call-up Allowance: ¥8,100/day* ● SDF Reserve Allowance: ¥4,000/month * The Training Call-up Allowance of ¥8,300/day supports the training of SDF Reserve Personnel who are former candidates for SDF Reserve Personnel in order for them to become SDF Ready Reserve Personnel.	● Training Call-up Allowance: ¥10,400-14,200/day ● SDF Ready Reserve Allowance: ¥16,000/month ● Continuous Service Incentive Allowance: ¥120,000/one term	● Education and Training Call-up Allowance: ¥8,200/day* * ¥7,900/day will be provided to individuals who passed the recruitment test before FY2019.
Special subsidy for companies employing SDF Reserve Personnel	● Special subsidy for companies cooperating with training of SDF Ready Reserve Personnel: ¥560,000/personnel * Provided when an SDF Reserve Personnel who is a former candidate for SDF Reserve Personnel is appointed as an SDF Ready Reserve Personnel. ● Special subsidy to secure understanding and cooperation from employers regarding the duties of SDF Reserve Personnel: ¥34,000/day	● Special subsidy for companies employing SDF Ready Reserve Personnel: ¥42,500/month	—
Call-up duty and other duties	● Defense call-up, civil protection call-up, disaster call-up, training call-up	● Defense call-up, civil protection call-up, security call-up, disaster call-up, training call-up	● Education and training call-up

(2) SDF Reserve Personnel, SDF Ready Reserve Personnel, and Candidates for SDF Reserve Personnel

It is essential to secure the required number of uniformed SDF personnel promptly depending on situational changes in the event of a crisis. To secure the required number promptly and systematically, the MOD maintains the following three systems: the SDF Reserve Personnel system, the SDF Ready Reserve Personnel system, and the Candidates for SDF Reserve Personnel system.²

 **See** Fig. IV-1-1-3 (Overview of Systems Related to SDF Reserve Personnel)

SDF Reserve Personnel become uniformed SDF personnel upon the issuance of a defense call-up order or other orders, and carry out logistical support and base guard duties. SDF Ready Reserve Personnel become uniformed SDF personnel and are assigned to carry out their mission together with incumbent uniformed SDF personnel as part of frontline units following the issuance of a defense call-up order or other orders. Candidates for SDF Reserve Personnel, some of whom are recruited among those with no prior experience as uniformed SDF personnel, are appointed as SDF Reserve Personnel after completing the necessary education and training.

As SDF Reserve Personnel and others work in their civilian jobs under normal circumstances, they need to adjust their work schedule to participate in periodic training exercises. Therefore, understanding and cooperation from the companies that employ these personnel are essential.

For this purpose, the MOD provides a special subsidy to the companies that employ SDF Ready Reserve Personnel and take necessary measures to allow such employees to attend training sessions for 30 days a year, by taking into consideration the burden on such companies.



Also, in 2017, the MOD established a framework that allows the MOD/SDF to provide such information as the scheduled term of a training call-up and scheduled term during which SDF Reserve Personnel/SDF Ready Reserve Personnel are called up to perform

actual operations and are appointed as uniformed SDF personnel, when requested by their employers. In 2018, the MOD established a system to provide a subsidy which aims to contribute to securing understanding and cooperation from the employers regarding the duties of SDF Reserve Personnel. Under the system, the employers are provided with a subsidy if (1) SDF Reserve Personnel or SDF Ready Reserve Personnel respond to a defense operation call-up order, civil protection dispatch call-up order, or disaster relief call-up order, etc., or (2) if they have no choice but to leave their regular occupations due to injuries during their duties, etc.

In addition, a special subsidy to the companies that cooperate with training of SDF Ready Reserve Personnel was established in 2020. The subsidy is paid to companies that employ people who, after being a Candidate for SDF Reserve Personnel with no prior experience as uniformed SDF personnel, are appointed as SDF Ready Reserve Personnel after completing the necessary education and training, and that take necessary measures to allow such employees to attend training sessions.

SDF Ready Reserve Personnel were called up at the time of the 2018 July Heavy Rain³ and the 2018 Hokkaido Eastern Iburi Earthquake.⁴ In 2019, during the East Japan Typhoon (Typhoon Hagibis)⁵ and the 2020 July Heavy Rain,⁶ both SDF Ready Reserve Personnel and SDF Reserve Personnel were called up. In those cases, they carried out activities including transportation of goods and livelihood support to the affected people. Moreover, in 2020, in a disaster relief mission to prevent infection of the novel coronavirus disease (COVID19) from spreading, SDF Reserve Personnel with medical qualification were called up and carried out their missions, including medical support.⁷

The MOD has been implementing various measures to increase and enhance SDF Reserve Personnel and others because SDF Reserve Personnel are anticipated to be called up more often in response to earthquake and other disasters. Specifically, recruitment and appointment were

Video: Overview of Systems Related to SDF Reserve Personnel

URL: https://twitter.com/jgsdf_reserve/status/1247004431922561026?s=09

² Many other countries also have reserve personnel systems.

³ In response to the 2018 July Heavy Rain, approximately 310 SDF Ready Reserve Personnel were called up. From July 12 to 30, they engaged in activities including removal of disaster waste and livelihood support to the affected people.

⁴ In response to the 2018 Hokkaido Eastern Iburi Earthquake, approximately 250 SDF Ready Reserve Personnel were called up. From September 8 to 23, they engaged in activities including livelihood support to the affected people.

⁵ In response to the 2019 East Japan Typhoon (Typhoon Hagibis), approximately 410 SDF Ready Reserve Personnel and SDF Reserve Personnel were called up. From October 15 to November 8, they engaged in activities including removal of disaster waste and livelihood support to the affected people.

⁶ In response to the 2020 July Heavy Rain, approximately 350 SDF Ready Reserve Personnel and SDF Reserve Personnel qualified as nurses were called up. From July 7 to 19, they engaged in activities including removal of disaster waste and medical support.

⁷ In a disaster relief mission against COVID-19 in 2020, 10 SDF Reserve Personnel with a medical qualification were called up and engaged in activities including medical support from February 18 to March 12.

VOICE

Voice of a Ready Reserve Officer and Their Employer

Ready Reserve Sergeant TOKI Hiroyuki, GSDF 105th Logistics Battalion, 2nd Logistics Company (Kanzaki District, Saga Prefecture)

In June 2020, my wife returned to her hometown Tanushimaru in Kurume City, Fukuoka Prefecture to give birth to my second daughter, born on July 4. From July 5, a heavy rain alert was issued across Kyushu and with the danger of the Chikugo River flooding, I had many sleepless nights. On July 7, there was a disaster call-up for Ready Reserve Personnel. When I was deployed, I remember the strong feeling that this was the time to return the favor to the people who watched over my wife and children, and work for the safety of myself and others.

I was primarily involved in managing and transporting goods in the disaster area. Due to the COVID-19 outbreak, I did not have the opportunity to directly support any disaster victims, but I vividly remember someone saying, “The SDF’s stay here is enough to make us relieved.”

My monthly trainings and recent deployment to the disaster area are made possible thanks to the understanding and support of my employer. This enabled me to offer my support

to the disaster victims and region. I would like to offer my heartfelt thanks to my workplace colleagues who sent me off during my sudden deployment.



The author performing disaster relief activities at the Yamae Village Gymnasium in Kyushu

ANAMI Kenji, Executive Officer and General Affairs Division Director, Rokugo Security Co., Ltd.

Our company is a local business consisting of 50 employees that primarily provides facility security and traffic security within the Kumamoto Prefecture.

Currently, we employ two members of the Ready Reserve Self-Defense Force and two members of the Reserve Self-Defense Force. They are all well-mannered on the job and serve as examples to their colleagues. Employing retired Self-Defense personnel offers great benefits in these days of personnel shortages, and I am extremely grateful to them.

Ready Reserve personnel have 30 days of training a year, and Reserve personnel have five days of training, and with the understanding and support of our employees, we work to ensure our Ready Reserve and Reserve personnel members can have perfect training attendance.

During the heavy rains faced in July 2020, one Ready Reserve employee and two Reserve employees were deployed to the disaster area to aid in cleanup and other activities, and I received a report that they all came together to give their all. Seeing Self-Defense Force personnel deployed to the local disaster we faced gave us courage and moral support. We will

continue proactively employing Reserve Self-Defense Force personnel, and do everything we can to fulfill our corporate responsibility.

In closing, I would like to express my heartfelt gratitude to all the Self-Defense Force personnel for their tireless efforts, and my wish that they continue to work for our nation’s safety.



Portrait of the author at Rokugo Security Co., Ltd.

expanded in 2018 to secure a wide variety of human resources from a broader range. The upper age limit for recruitment of leading privates and lower SDF Reserve Personnel was raised from “under 37” to “under 55” and the upper age limit for their continued appointment from “under 61” to “under 62.” An upper age limit is not

set for persons with a license for a medical practitioner. Their continued appointment is approved when it is confirmed that they properly maintain their medical techniques and that there is no problem with their duties as SDF Reserve Personnel.

The upper age limit for recruitment of leading privates

and lower SDF Ready Reserve Personnel was raised from “under 32” to “under 50.” In 2019 a new system was established to appoint SDF Reserve Personnel without experience in the SDF as SDF Ready Reserve Personnel after completing the necessary education and training.

Also, the MOD promotes the use of SDF Reserve Personnel in a wide range of fields, such as the appointment of retired SDF pilots, who were reemployed in the private sector through the re-employment system, as SDF Reserve Personnel.⁸

(3) Administrative Officials, Technical and Engineering Officials, Instructors, and Other Civilian Personnel

There are approximately 21,000 civilian personnel — administrative officials, technical and engineering officials, instructors, and others — in addition to uniformed SDF personnel in the MOD/SDF.⁹ Civilian personnel are mainly recruited from those who have passed the Recruitment Examination for Comprehensive and General Service National Public Employees conducted by the National Personnel Authority (NPA), and those who have passed the Recruitment Examination for Ministry of Defense Specialists conducted by the MOD. After participating in the common training course, civilian personnel recruited in this process work in a wide range of fields.

Administrative officials are engaged in defense-related policy planning in the Internal Bureaus of the MOD and at the Acquisition, Technology and Logistics

Agency (ATLA); analysis and evaluation at the Defense Intelligence Headquarters; and administrative works at the SDF bases, the Regional Defense Bureaus, and other locations throughout the country.

Technical and engineering officials are working in the Internal Bureaus of the MOD, the ATLA, the SDF bases, the Regional Defense Bureaus, and other locations throughout the country. They are engaged in constructing various defense facilities (headquarters, runways, magazines, etc.), carrying out research and development (R&D), efficient procurement, maintenance and improvement of a range of equipment, as well as providing mental health care for SDF personnel.

Instructors conduct advanced research on defense and provide high-quality education to SDF personnel at the National Institute for Defense Studies, the National Defense Academy, the National Defense Medical College, and other organizations.

In response to the “Directive for Organization and Allocation of Personnel Expense in FY2021 to Proceed with the Core Issue of the Cabinet Office” (decision by the Prime Minister on July 21, 2020), which listed “development of security arrangement while further improving the efficiency of defense force development” as one of the priority areas, the MOD has increased the number of defense officials in FY2021 in preparation for the implementation of NDPG and The Medium Term Defense Program (MTDP).

 See Reference 52 (Breakdown of Ministry of Defense Personnel, etc.)

⁸ The reemployment system for SDF pilots aims to prevent the outflow of active young SDF pilots to civil aviation companies in an unregulated manner. This system is also designed to utilize SDF pilots over a certain age as pilots of commercial airlines, and is also significant from the perspective of the development of the airline industry in Japan as a whole.

⁹ Among the employees of the MOD, special national government employees are called “SDF personnel,” including administrative officials, technical and engineering officials, instructors, and others, in addition to uniformed SDF personnel.

VOICE

Contributions of Defense Technical Official

MIZUSHIMA Kaito, Subsection Chief, Procurement Planning Division, Procurement Department, Okinawa Defense Bureau (Kadena Town, Nakagami County, Okinawa Prefecture)

I joined the Ministry of Defense in 2013 as a defense technical official and now perform construction related duties for facilities of the Self-Defense Forces and the U.S. Forces stationed in Japan. The idea that I can contribute to the peace of Japan through a diverse range of engineering activities including runway construction in airfields, seawall development in ports and civil work around buildings attracted me to this job. Currently I am in charge of environmental surveys for the construction program of Futenma Replacement Facilities. I am giving thorough consideration for the surrounding natural and living environment to develop satisfying facilities for everyone, including the user of them and their neighbors. I find it worth

working for that I can contribute to the mitigation of the impact of military bases on Okinawa Prefecture through such projects.



The author (second from the left) performing a biological survey of sea plants

IKEHARA Ryota, Attendant, Repair Team, Maintenance Section, General Administration Department, GSDF Officer Candidate School (Kurume City, Fukuoka Prefecture)

I became a defense technician in April 2020, and have been stationed at the GSDF Officer Candidate School in Fukuoka Prefecture. I was motivated to join the GSDF in university when I saw reports of the SDF being deployed to the areas struck by the Kumamoto earthquake and heavy rains in northern Kyushu.

As I was considering what kind of career I should pursue after I graduated, I learned at a Ministry of Defense seminar that I could leverage the architectural skills I learned in university as part of facility management activities for the GSDF. I thus decided to apply to the GSDF. Currently, I am involved in laying asphalt on the military base premises.

In the future, I would like to contribute to the safety of Japan by maintaining a wide range of facilities as a defense technician supporting the facilities of the GSDF.



The author carrying out measurements in preparation to lay asphalt

2 Daily Education

1 Education of Uniformed SDF Personnel

Enhancing the ability of the individual uniformed SDF personnel who comprise SDF units is essential for the execution of the units' duties. For this purpose, the respective SDF training units and schools provide opportunities for phased and systematic education according to rank and duties to nurture necessary qualities and instill knowledge and skills.

A considerable extent of human, temporal, and economic efforts such as securing instructors with special skills, and improving equipment and educational facilities, are necessary for providing education. In

the event that personnel need to further improve their professional knowledge and skills, or that it is difficult for them to acquire such knowledge and skills within the SDF, the MOD/SDF commissions education to external institutions, including those abroad, as well as domestic companies and research institutes. Furthermore, based on the MTDP, in order to promote cross-domain joint operations, the MOD/SDF will strengthen joint education and standardize the curriculum, while at the same time improving the education infrastructure for the utilization of cutting-edge technology and expansion of recruitment including female SDF personnel.

VOICE

Voices of SDF Personnel Studying at Graduate Schools, etc., at Home or Abroad

National Defense University
The Dwight D. Eisenhower School for National Security and Resource Strategy
(United States) Colonel FURUSHO Akihiro
(Currently belongs to the Training Evaluation Research and Development Command, GSDF)

I spent one year from July 2020 studying at the School for National Security and Resource Strategy of the National Defense University of the United States in Washington, DC. This university aims to foster senior leaders who can assist the president and other officials, and has produced high-ranking government officials from around the world, including President Eisenhower. The student body with diverse careers includes U.S. military personnel, counselors from the Executive Office of the President, the State Department, and more, as well as international students (colonel level). Through friendly competition, the students acquire a broad perspective and strategic thinking. In the future, I would like to make use of the results I gained here and contribute even further to the defense of Japan.



At the National Defense University of the United States

Columbia University, School of International and Public Affairs (SIPA) (United States)
Lieutenant Commander YOKOKAWA Ryota
(Currently belongs to the MSDF Command and Staff College)

Since September 2020, I have been studying at Columbia University's School of International and Public Affairs in New York City to learn about security policy and international conflict resolution. In my daily classes, I can exchange ideas with a diverse group of students from more than 30 countries around the world on the valuable academic research and field experiences provided by renowned professors. My experience studying abroad has been a wonderful opportunity to expand my knowledge.



At the main campus of Columbia University

After returning to Japan, I intend to contribute to the missions of the MOD/SDF by fully utilizing the broad perspective and knowledge I gain while studying abroad.

Australian Defence College (Australia)
Secretary ORITO Eisuke (Currently Director of the Local Cooperation Division, Bureau of Local Cooperation, Internal Bureau)

I had the privilege to join the Defense Strategic Studies Course at the Australian Defence College for about one year from January 2020. The course is designed to develop strategic-level thinking. As COVID-19 spread globally during the course, the lectures and discussions naturally focused on what would become of the "after COVID-19" world and how we could make each country and region, as well as the world as a whole, peaceful and stable.



The author (center) receiving a special award (the Geddes Gavel Award) at the graduation ceremony

Under such conditions, I believe it was an invaluable asset for me to be able to have discussions with colonel-level military and civilian officers from many countries including Australia and learn their diverse perspectives, as I will continue to be engaged in security policy.

Captain NAGAI Yosuke, Clinical Psychology Program, Department of Human Sciences, Graduate School of Humanities, Tokyo Metropolitan University
(Hachioji City, Tokyo Prefecture)

After graduating from university, I joined the ASDF and worked for several years in a unit that maintains aircraft. My dream of training at a graduate school in Japan came true when I entered the graduate school of Tokyo Metropolitan University.



The author (right) conducting counseling

Currently, I am enrolled in a master's course and studying hard to learn the theories and techniques necessary for counseling and other psychology work. After completing my training, I would like to obtain qualifications, such as those of a clinical psychologist. I would like to use the skills I have acquired through my training to engage in counseling and mental health measures for SDF personnel, and contribute to the execution of their missions by helping them to maintain and improve their mental health.

3 Measures Aimed at Ensuring Effective Use of Human Resources

1 Effective Use of Human Resources

With regard to the personnel structure of the SDF, the authorized number of SDF personnel has been on a decline. On the other hand, there has been the need for more-skilled personnel and personnel with expertise in order to respond to the sophistication of equipment as well as the diversification and internationalization of SDF missions.

In light of such circumstances, while ensuring the robustness of the SDF, the NDPG and others plan to raise the mandatory early retirement age by one year during the period of the MTDP, and another one year during the period of the next MTDP in stages for each rank in order to ensure further utilization of older human resources who have rich knowledge, skills, and experience. The retirement ages of personnel from the rank of Ichii (Captain (Ground Self-Defense Force [GSDF], Air Self-Defense Force [ASDF])/Lieutenant (Maritime Self-Defense Force [MSDF])) to Issa (Master Sergeant (GSDF, ASDF)/Petty Officer 1st Class (MSDF)) and personnel from the rank of Issa (Colonel (GSDF, ASDF)/Captain (MSDF)) to Sansa (Major (GSDF, ASDF)/Lieutenant Commander (MSDF)) were raised in 2020 and 2021 respectively. The SDF also continues to expand reenrollment after retirement (up to the age of 65) and further promotes utilization of the skills of retired SDF

personnel in fields requiring high levels of expertise.

In addition, with the aim to promote manpower saving and automation by leveraging technological innovations such as artificial intelligence (AI), the MOD/SDF is working on the establishment of the necessary environment. For example, creating a support function for AI utilization through the outsourcing of advisory operations regarding such matters as the promotion of AI utilization and through efforts aimed at recruiting AI/data analysis officers and the education of SDF human resources through outsourced courses.

In addition, in order to ensure an operating ratio with a limited number of personnel, some MSDF vessels have introduced a system of rotating shift duty among multiple teams of crews to increase the number of operation days. The introduction of this crew system to new types of destroyers (FFM) is also being considered.

 Fig. IV-1-1-4 (Rank and Retirement Age of SDF Personnel)

2 Improvement of Living and Work Environment and Treatment

To enable all SDF personnel to maintain high morale and continue to fully exercise their ability, the NDPG and the MTDP state that the MOD/SDF will improve living and work environment. Specifically, to ensure readiness, the SDF will accelerate its acquisition and renewal of the necessary barracks and housing, and also promote measures for deteriorated and earthquake-resistant facilities. Additionally, it will steadily renew worn-out living-related and work equipment, and secure the requisite amount of daily consumables.

Because SDF personnel carry out their missions under a severe environment, the SDF will improve their treatment based on the special nature of their missions and work environment. Specifically, in order to ensure appropriate treatment in accordance with the

Fig. IV-1-1-4 Rank and Retirement Age of SDF Personnel

Rank	Designation	Mandatory Retirement Age
General (GSDF), Vice Admiral (MSDF), General (ASDF)	Sho	60
Major General (GSDF), Rear Admiral (MSDF), Major General (ASDF)	Shoho	
Colonel (GSDF), Captain (MSDF), Colonel (ASDF)	Issa	57
Lieutenant Colonel (GSDF), Commander (MSDF), Lieutenant Colonel (ASDF)	Nisa	56
Major (GSDF), Lieutenant Commander (MSDF), Major (ASDF)	Sansa	
Captain (GSDF), Lieutenant (MSDF), Captain (ASDF)	Ichii	55
First Lieutenant (GSDF), Lieutenant Junior Grade (MSDF), First Lieutenant (ASDF)	Nii	
Second Lieutenant (GSDF), Ensign (MSDF), Second Lieutenant (ASDF)	Sani	
Warrant Officer (GSDF), Warrant Officer (MSDF), Warrant Officer (ASDF)	Juni	
Sergeant Major (GSDF), Chief Petty Officer (MSDF), Senior Master Sergeant (ASDF)	Socho	53
Master Sergeant (GSDF), Petty Officer First Class (MSDF), Master Sergeant (ASDF)	Isso	
Sergeant First Class (GSDF), Petty Officer Second Class (MSDF), Technical Sergeant (ASDF)	Niso	
Sergeant (GSDF), Petty Officer Third Class (MSDF), Staff Sergeant (ASDF)	Sanso	—
Leading Private (GSDF), Leading Seaman (MSDF), Airman First Class (ASDF)	Shicho	
Private First Class (GSDF), Seaman (MSDF), Airman Second Class (ASDF)	Isshi	
Private (GSDF), Seaman Apprentice (MSDF), Airman Third Class (ASDF)	Nishi	

Notes: 1 The mandatory age of retirement for SDF personnel who hold the rank of General (GSDF and ASDF) or Admiral (MSDF), and serve as Chief of Staff of Joint Staff Office, GSDF Chief of Staff, MSDF Chief of Staff, or ASDF Chief of Staff, is 62.
2 The mandatory age of retirement for SDF personnel who hold positions such as physician, dentist, pharmacist, musician, military police officer, or information analyst, is 60.



Improvement of Living and Work Environment

risk and other particularities of their missions and the characteristics of the area of the office, the SDF will make improvements to special work allowance,¹⁰ etc., and procure portable beds and better emergency rations to improve their ability to respond to disasters. To enable SDF personnel to fulfill their missions with high morale and pride, the MOD/SDF will improve their treatment through measures concerning honors and privileges, including the enhancement of the defensive meritorious badges to appropriately acknowledge their achievements.

In light of the severe recruitment environment, the Act on Remuneration, etc., of Ministry of Defense Personnel was revised in 2019 to raise salaries with a focus on starting pay.

3 Dealing with Retirement and Re-employment of SDF Personnel and Related Matters

In order to maintain the strength of the SDF, many uniformed SDF personnel retire in their mid-50s (personnel serving under the early retirement system) or in their 20s to mid-30s (uniformed SDF personnel serving under the fixed-term service system). Therefore, many of them need to find another job after retirement in order to secure their livelihoods.

Since supporting re-employment is the responsibility of the Japanese Government (the MOD) as the employer, and is crucial both for resolving any concerns that uniformed SDF personnel may have about their future as well as for securing qualified human resources, the MOD conducts support measures such as occupational training useful for their re-employment.

In addition, as the MOD does not have the authority to provide them with employment placement, the Foundation for the SDF Personnel Support Association provides free job consultation services for retired SDF personnel with permission from the Minister of Health, Labor and Welfare and the Minister of Land, Infrastructure, Transport and Tourism.

Retired uniformed SDF personnel have excellent abilities in planning, leadership, faculty, cooperativeness, and responsibility gained through their work performance, education and training. Furthermore, they have various qualifications and licenses acquired through their duties and vocational training. Therefore, they are making positive contributions in a broad range of sectors, including manufacturing and service industries, as well as finance, insurance, real estate, and construction industries, in addition to the areas of disaster prevention and risk management at local governments.

Based on the NDPG and MTDP, the MOD/SDF will

strive to further improve re-employment support by expanding vocational training subjects and support for step-by-step acquisition of qualifications before their retirement. The MOD also strives to further utilize retired SDF personnel while strengthening collaboration with local governments and related organizations from the perspective of utilizing the knowledge, skills, and experience of retired SDF personnel.

Specifically, as of the end of March 2021, a total of 612 retired SDF personnel work as crisis management officers at local governments' disaster prevention bureaus — 46 prefectural bureaus have 104 of them in total, and 431 municipal bureaus have 508. As this strengthens collaboration with local governments and enhances the ability to deal with crisis management, including disaster prevention, the MOD/SDF will continue active support for the utilization of retired SDF personnel in local governments' disaster prevention bureaus by further enhancing these efforts.

MOD provides “Disaster Prevention and Crisis Management Education” for SDF personnel scheduled for retirement who seek employment in such sectors as disaster prevention departments in local governments. A person who completed the course is certified as a “regional disaster prevention manager” by the Cabinet Office on request. Previously, SDF personnel had to reach the rank of “Sansa or higher or Ichii with the effective work experience of a Sansa” to be certified. However, in light of the actual conditions of the mission of SDF personnel dispatched to disasters and other factors, MOD/SDF negotiated the expansion of the conditions for a regional disaster prevention manager, resulting in the expansion to “Ichii or higher or Nii (First Lieutenant (GSDF, ASDF)/Lieutenant Junior Grade (MSDF)) with the effective work experience of an Ichii.”

In FY2021, in order to increase and enhance SDF Reserve Personnel and SDF Ready Reserve Personnel, in addition to uniformed SDF personnel in fixed-term system, it was decided to provide a scholarship for uniformed SDF personnel in fixed-term system upon retirement when they enter university in Japan, after completing their tenure and serve as SDF Reserve Personnel or SDF Ready Reserve Personnel while at university.


 See Fig. IV-1-1-5 (Major Vocational Training Provided to Support Re-employment)

Fig. IV-1-1-6 (Re-employment Support in FY2020)

Meanwhile, with regard to the re-employment of SDF personnel, new regulations about re-employment were introduced in October 2015, replacing the former prior approval system. As are the cases in other national government employees, the following three regulations

¹⁰ Since 2020, special provisions are made for disaster dispatch allowances for employees engaged in disaster dispatch to prevent the spread of new coronavirus infections.

VOICE

New SDF Graduates – Voices of Reemployed Personnel and Their Employers

Who are new SDF graduates?

Fixed term service personnel who have completed their term of service in the SDF and seek employment in the private sector are people who have already acquired basic professional qualities like discipline, a sense of responsibility, the ability to perform and teamwork, through years of various training and rigorous exercises in the SDF. In order to avoid the misunderstanding that such fixed-term SDF personnel “retired mid-career from the SDF,” it has been decided to refer to them as “new SDF graduates.”

Voice of new SDF graduate

OYAMA Shunya, Front Manager, Saitama Branch, Fourth General Branch, Mitsui Fudosan Residential Service Co., Ltd.

I worked at the ASDF’s Matsushima Air Base for three years. After completing my term of service, I joined Mitsui Fudosan Residential Service Co., Ltd. When I started working for a private company after leaving the SDF, I sometimes felt lost stepping into a completely different environment, from the content of my work to the atmosphere within the company. But the training provided after I joined the company was substantial, and I was able to familiarize myself with the work from scratch. In addition, with the courteous support of the Base Support Office, I was able to balance my job hunting activities with my SDF duties.

Going forward, I would like to build my new career while utilizing the energy and strength I attained while in the SDF in friendly competition with my colleagues.



OYAMA Shunya, Front Manager, Saitama Branch, Fourth General Branch, Mitsui Fudosan Residential Service Co., Ltd.

Voice of employer

TAKAMATSU Shigeru, Chairman of the Board, Mitsui Fudosan Residential Service Co., Ltd.

As an apartment management company of the Mitsui Fudosan Group, our company manages about 210,000 units in the Tokyo metropolitan area and Chubu area, including everything from high-rise apartments centered on apartments developed and sold by Mitsui Fudosan Residential, to large-scale urban apartments associated with redevelopment projects.

The SDF started introducing candidates from 2019, and we welcomed one new SDF graduate and a retired SDF member to our company for the first time in 2020. As members of the SDF, they worked under strict discipline and understand hierarchical relationships. They are always cheerful and proactive in their duties, and play active roles working in smooth communication with their colleagues.



TAKAMATSU Shigeru, Chairman of the Board, Mitsui Fudosan Residential Service Co., Ltd.

were put in place in order to ensure the trust of the public regarding the fairness of official duties: (1) regulation on requesting re-employment of other personnel and retired personnel and requesting information; (2) regulation on seeking employment opportunities at companies in which retired personnel had a stake whilst in office; and (3) regulation on reemployed personnel making requests.¹¹ In order to ensure strict observation of these regulations,

bodies comprised of academic experts with no history serving as SDF members (Defense Personnel Review Board’s Separate Meeting for Monitoring Reemployment and Cabinet Office’s Re-employment Surveillance Commission) monitor the situation, and any violation will be met with penalties.

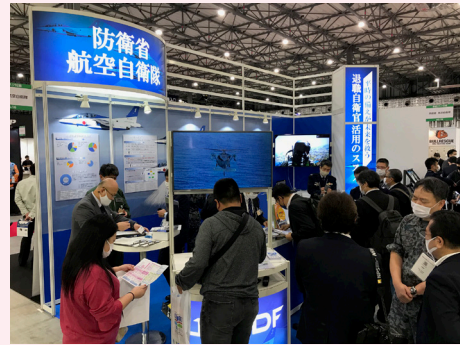
Additionally, for the purpose of appropriate implementation of unified management and disclosure

¹¹ Stipulated in Parts 2, 3 and 4 of Article 65 of the SDF Law

Exhibiting at the Security & Safety Trade Expo 2020 – Promotion of Employment of Retired Personnel in the Crisis Management Field

The ASDF exhibited at the Security & Safety Trade Expo held at Tokyo Big Sight in Koto Ward, Tokyo from October 21 to 23, 2020. The expo is Japan's largest comprehensive trade show on the theme of crisis management. Every year, it brings together the latest products, services, and more in the three main fields of Disaster Risk Reduction, Business Risk Management, and Security. The ASDF promoted retired SDF personnel as human resources who are strong in crisis management. With the catchphrase "Preparedness in peacetimes will save the future: Recommending the use of retired SDF personnel," the ASDF conducted public relations activities to encourage the use of retired SDF personnel among the visitors related to companies. Although the overall number of visitors was down due to the COVID-19 crisis, the booth featuring the Blue Impulse was well received and attracted a large number of visitors. On a special stage, the ASDF organized a presentation with the cooperation of veteran personnel, who greatly promoted the usefulness of retired SDF personnel. In Japan, which is prone to natural disasters and other disasters, we believe that there are still many places where

the experience and abilities of retired SDF personnel, who have been engaged in crisis management throughout their service, can be of use. We also realized that there is room for the public to more widely know that SDF personnel retire young in their mid-fifties and that some SDF personnel retire at the end of their term of service in their twenties or thirties. We will continue to disseminate information about retired SDF personnel, who are valuable human resources.



Exhibiting at the Security & Safety Trade Expo 2020

VOICE

Voice of Retired SDF Personnel Member Working in Disaster Prevention Bureau of Local Governments, etc. – Japan's First "Wide Area Administration Association" Crisis Management Officer

SATO Ryo, Crisis Management Officer, Okunoto Regional Association

The Okunoto Regional Association is a special local public entity that is responsible for wide-area firefighting, airport utilization promotion services, etc., in two cities and two towns: Wajima City, Suzu City, Noto Town and Anamizu Town. In October 2019, the ordinances concerning wide-area disaster prevention and the establishment of crisis management officers were revised to create Japan's first specialized crisis management post.

My duties are to provide guidance and advice on regional disaster prevention plans, civil protection plans, and disaster drills prepared by each city and town, and to liaise and coordinate with the SDF and other related organizations in the event of a disaster.

My specific activities include participating in disaster prevention meetings and assisting in the creation of disaster prevention training plans. I also visit the departments in charge of crisis management in each city and town every month to exchange views and provide information. In addition, I conduct disaster prevention awareness activities such as disaster prevention training and lectures for disaster prevention officers, junior and senior high school students, and various organizations. In June 2020, in order to prevent the spread of COVID-19, I made arrangements to request the GSDF (Kanazawa) to provide disaster relief. The GSDF provided education and training for about 140 medical personnel, social

welfare workers, firefighters, and others in the area on how to put on and take off protective clothing against infections, set up zones, and other matters. Major results were achieved in terms of improving the response capabilities of personnel and formulating procedures to prevent clusters in facilities.



Fire department personnel and the author (center)



The author at a disaster drill (author: second from left)

Fig. IV-1-1-5 Major Vocational Training Provided to Support Re-employment

In order to maintain the strength of the SDF, many uniformed SDF personnel retire in their mid-50s (personnel serving under the early retirement system) or in their 20s to mid-30s (uniformed SDF personnel serving under the fixed-term service system).

Since supporting re-employment is the responsibility of the Japanese Government (the MOD) as the employer, and is crucial both for resolving any concerns that uniformed SDF personnel may have about their future as well as for securing qualified human resources, the MOD conducts support measures such as occupational training useful for their re-employment.

■ Re-employment support for uniformed SDF personnel serving under the fixed-term service system



■ Re-employment support for uniformed SDF personnel retiring at an early age



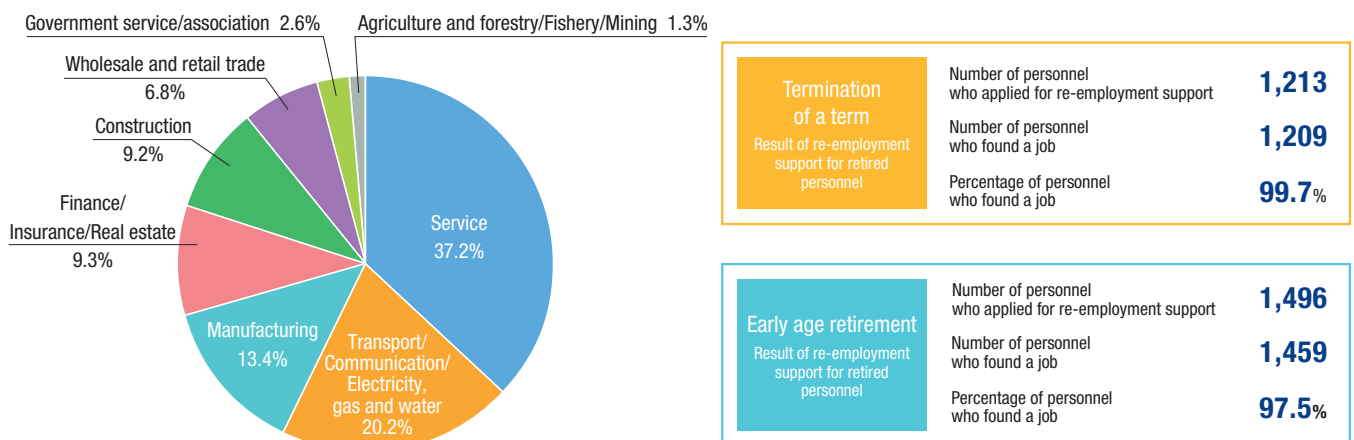
■ Major occupational training for re-employment

Vehicle operation	• Large-sized • Regular-sized • Special (large-sized) • Semi-medium-sized • Medium-sized
Operation of facility machines	• Forklift • Boiler engineer • Heavy-duty vehicle • Crane • Vehicle for high-place work
Telecommunication technology	• Electrician • Licensed electrician • Telecommunication worker • Special radio communication operator
Handling of dangerous materials	• Hazardous material engineer • Person responsible for handling poisonous and deleterious substances • Person responsible for manufacturing safety of high pressure gas • Person responsible for class 3 refrigerating machinery
Labor management practice, etc.	• Security guard certification examination • Drone operator • Operation manager • Warehouse manager • Marine technician • Social and labor insurance consultant
Information processing technique	• Examination for basic computer skills • Microsoft Office Specialist • IT Passport • Fundamental (applied) information technology engineer
Social welfare	• First-level training for nursing care workers • Housing environment coordinator for elderly and disabled people • Mental health management • Care fitter
Legal practice, etc.	• Real estate transaction specialist • Certified professional secretary examination • Administrative scrivener • Certified domestic travel service supervisor • Registered customs specialist
Others	• Disaster prevention and crisis management education • Financial planner • Official Business Skill Test in Book-keeping • TOEIC • Manicurist • Chef • Fire defense equipment officer • Health officer • Condominium manager • Welding technician • Auto technician • Medical office work • Dispensing fee calculation • Care clerk • Medical clerk


* The names of the occupational training topics for each category are listed in descending order of the number of participants.

* Occupational training in about 150 topics, including those above, are conducted.

Fig. IV-1-1-6 Re-employment Support in FY2020



of reemployment information by institutionalizing notification and announcement of such information by the Cabinet, it has been decided that information on the re-employment status of retired SDF personnel who were in managerial positions (equivalent to the position of Senior Coordinator in the MOD or higher) is to be published every fiscal year by the Cabinet. Most recently, notifications of reemployment of the retired SDF personnel who were in managerial positions submitted during FY2019 were compiled, and a total of 203 cases were officially announced in October 2020.

 See Reference 53 (Main Measures for Re-employment Support) Reference 54 (Employment Situation of Retired Uniformed SDF Personnel in Disaster Prevention-related Bureaus in Local Government)

4 Initiatives to Support Families

In addition to exchanges between units and personnel's families, as well as between the families, the MOD in cooperation with relevant external groups and organizations is also actively working to develop a family support system to be implemented in the event of large-scale natural disasters and other events, which will include receiving cooperation in confirming the safety of the family members of SDF personnel. All of these are conducted as routine initiatives.

The MTDP also includes promotion of various family support measures in order to ensure a sustainable response posture for a long period of time. Specific welfare services for SDF personnel deployed overseas include facilitating direct communication with their families in Japan by means such as e-mail and video teleconference systems. Support for sending comfort items from their families at a later date is also provided. Moreover, briefing sessions for families of the dispatched SDF personnel are held to provide them with a variety of information, and a consultation desk exclusively for families of the dispatched SDF personnel (family support



Briefing session for families of dispatched SDF personnel (May 2019)

centers), a website for the families of the dispatched SDF personnel and similar facilities have been established to provide consolation for the various questions and concerns raised by the families.

5 Initiatives to Maintain Rigorous Discipline

The MOD/SDF has gained greater expectations from Japanese people in recent years, and it is indispensable for us to gain their support and trust all the time to fully exercise our ability to complete our duties. In order to meet their expectations to this end, the SDF personnel are required to be an invariably disciplined existence more than ever.

The MOD/SDF has so far strived to foster well-disciplined personnel by impressing in them an awareness of compliance with the law through setting up periodic campaigns, such as the “MOD Anti-Drug Abuse Month,” “Self-Defense Forces Personnel Ethics Month,” and “Self-Defense Personnel Harassment Prevention Week,” and taking various effective measures such as thorough instructions on service discipline.

The core element of defense capability is SDF personnel; in order to exert organizational strength and respond decisively to a wide range of situations, the SDF must create a working environment that enables SDF personnel to perform their tasks confidently with high morale and sense of security.

Workplace harassment and bullying are major problems; these acts could lead to a violation of the dignity and human rights of SDF personnel, suicide incidents, and adversely affect work environment. In FY2016, the Power Harassment Hotline was established in the Office of the Director, Honors and Discipline Division, Bureau of Personnel & Education on a permanent basis to respond to consultations from SDF personnel over the phone and online. It's reported that the number of consultations from SDF personnel has doubled year-on-year. The hotline received 252 such



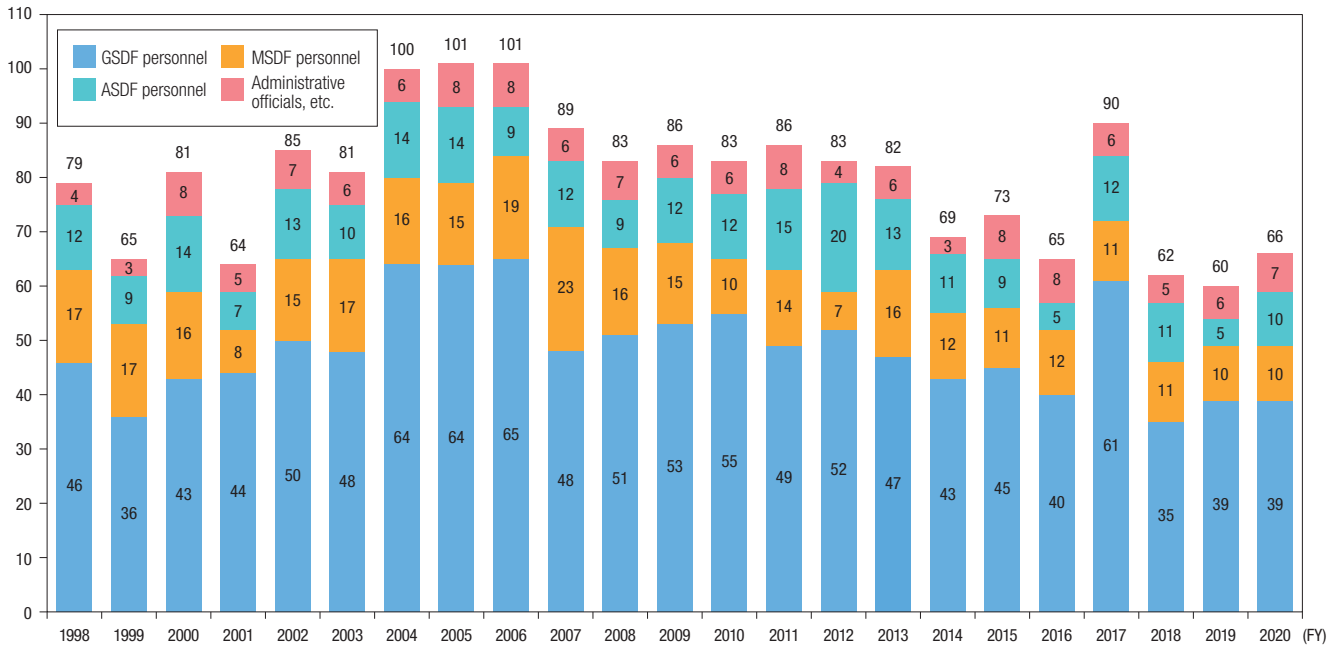
SDF personnel receiving education on harassment prevention

Fig. IV-1-1-7 Changes in the Number of Consultations to the MOD's Power Harassment Hotline

(Unit: No. of Cases)

Category	FY2016	FY2017	FY2018	FY2019	FY2020
MOD Power Harassment Hotline	92	140	252	519	1,010
Consultation Desk for Each Institution	96	139	271	419	332
Total	188	279	523	938	1,342

Fig. IV-1-1-8 Changes in the Number of SDF Personnel Committing Suicide



cases in FY2018, an increase from 140 cases in FY2017. In FY2020, the hotline received in total 1,010 cases, an increase from 519 cases in FY2019.

See Fig. IV-1-1-7 (Changes in the Number of Consultations to the MOD's Power Harassment Hotline)

Workplace harassment is caused by the deficient knowledge of it and the communication gap between superiors and their subordinates. In order to resolve and prevent these issues, the SDF provides (1) the classroom training and remote learning to enhance understanding and raise awareness of workplace harassment among SDF personnel, (2) the education to promote understanding including soft skills, and to enhance leadership capabilities among SDF personnel (particularly those in managerial positions), and (3) the measures to improve and reinforce the consultation system.

For the purpose of eradicating disciplinary violations such as assault, injury, and workplace harassment, the standards of disciplinary actions were tightened in March 2020, and the SDF has taken a zero-tolerance approach since then.

In addition to that, harassment consultation contact points with alliance lawyers as the third party were established in FY2020.

6 Initiatives to Prevent Suicide among SDF Personnel

More than 100 SDF personnel committed suicide annually during the period between FY2004 and FY2006. Although the number has gradually declined since FY2007, to 66 in FY2020, the loss still continues, with more than 60 SDF personnel taking their own precious lives. That fact is truly a tragic loss for the families of the deceased, as well as a huge loss to the SDF.

See Fig. IV-1-1-8 (Change in the Number of SDF Personnel Committing Suicide)

The survey of the suicide incidents in the SDF in FY2019 confirmed that disproportionately large numbers of suicide victims were young SDF personnel in their teens and 20s, and middle-aged and older SDF personnel in their 50s, and those suicides incidents frequently occurred among SDF personnel who experienced changes of work and/or living environments, which is one of risk factors for suicide.

In light of such circumstances, evidence based positive measures were taken in FY2020, such as interviews with SDF personnel in order to find out any troubles at work and home and proactive advice is given to those with symptoms of mental illness to go for

outside counseling and/or receive medical consultations at medical institutions.

Measures are also being implemented to prepare for the period of July through September, when the number of suicide incidents tends to increase. Since 2021, the mental health awareness campaign months of June and July have been set forth and promoted in order to suppress the number of incidents.

7 Commemorating Personnel who Perished in the Line of Duty

Since the establishment of the National Police Reserve in 1950 and through its evolution via the National Safety Force and the Coastal Safety Force into the SDF today, SDF personnel have been striving to accomplish the noble mission of protecting the peace and independence of Japan. They have been devoting themselves unstintingly to training, day and night, to live up to the expectations and trust of Japanese citizens, regardless of danger, and with a strong sense of responsibility. During this time period, however, more than 2,000 personnel have lost their lives in the line of duty.

In the MOD/SDF, funeral ceremonies in order to express condolences are carried out by each unit to which the personnel who perished in the line of duty



Memorial Service for members of the SDF personnel who lost their lives in the line of duty, conducted with the participation of Prime Minister Suga (November 2020)

belonged. Moreover, in order to eternally recognize the achievements of the SDF personnel who perished in the line of duty, and to express deep honor and condolences, memorial ceremonies are carried out in various forms, such as the Memorial Service for members of the SDF personnel who lost their lives in the line of duty conducted with the participation of the Prime Minister. Achievements of 25 SDF members (14 GSDF, 8 MSDF, and 2 ASDF members, and one member of another organization) who lost their lives in the line of duty were recognized in a Memorial Service in FY2020.¹²

¹² The Monument for SDF Personnel who Perished in the Line of Duty was constructed in 1962 in Ichigaya. In 1998, the Memorial Zone in its current form was completed by combining this monument with other monuments located in the same area. The MOD holds an annual memorial ceremony for SDF personnel who perished in the line of duty with the attendance of surviving family members, the Prime Minister, high-ranking officials of the MOD/SDF including the Minister of Defense, former Defense Ministers, and others. At the Monument for SDF Personnel who Perished in the Line of Duty in the Memorial Zone, there is an iron plate containing the names and other information of personnel who perished in the line of duty. When foreign dignitaries such as Defense Ministers visit the MOD, they make offerings of flowers, expressing their respect and condolences to personnel who perished in the line of duty. Memorial ceremonies are also held at individual SDF posts and bases.

Section 2

Further Promotion of Work-Life Balance and Women's Participation

The security environment surrounding Japan has become increasingly severe, and both the number and the duration of situations requiring the MOD/SDF's response are increasing. On the other hand, it is anticipated that a number of MOD staff, both male and female, will face time and commuting constraints for childcare, nursing care and other reasons due to big changes in social structure.

Amid such challenging circumstances, ensuring preparedness to consistently respond to various situations requires creating an environment that enables staff to be sound both mentally and physically, maintain high morale, and fully demonstrate their abilities. On the basis of this view, the MOD/SDF promotes initiatives to achieve work-life balance of its staff members.

Also, the MOD/SDF has been proactively encouraging the active participation of female personnel, and the number of female personnel is on the rise.

The MOD/SDF established the "Action Plan for Promoting the Active Participation of Female Employees and Work-Life Balance" (the "Action Plan") in 2015 in order to promote work-life balance and the further expansion of the recruitment and the promotion of female personnel in a unified manner and has been conducting a variety of initiatives to execute the plan. As in March 2021 management of working hours and management reform were added to the new "Action Plan," the MOD/SDF will strengthen and expand efforts.

1 Working Style Reform to Promote Work-Life Balance

(1) Value and Mentality Reform

In order to implement working style reform, focus needs to be placed especially on reforming the values and mentality of staff in managerial positions regarding working style. Since FY2017, the MOD/SDF has been implementing educational initiatives, such as message given by the MOD/SDF leaders, seminars, and lecture meetings aimed at raising awareness concerning working style reform and the concept of work-life balance. With the increase of personnel facing time/ commuting constraints for child/family care, the MOD/SDF is also promoting correction of long working hours and encouraging taking leave to ensure proper work-life balance so that every member can exert his/her full potential.

In addition, the MOD/SDF is conducting initiatives for "management reform" aimed at enhancing the management ability of administrative staff.

(2) Work Reform in the Workplace

It is important that initiatives for the promotion of work-life balance are implemented in a way which fits the individual workplaces, and that staff members themselves consider specific measures for improving their workplace environment. This approach will lead to developing effective initiatives and workplace climate. Based on this perspective, since 2016, the annual "Competition for Initiatives to Promote Working Style Reform at the Ministry of Defense" has been held during the campaign period for enhancing work-life balance, etc. The Minister of Defense and the State Minister of Defense honored particularly excellent initiatives, out of the applications received from various organizations

and others, and used them to help achieve work reform at each workplace. The MOD/SDF proactively engages in further enhancement of operation efficiency and efforts for appropriate working hours management to correct long working hours.

(3) Flexible Working Hours and Location

Realizing more flexible working hours and work locations is necessary in light of factors such as workload fluctuations and time constraints faced by individuals. For this reason, the MOD/SDF introduced the flextime system in 2016 and enabled its staff to choose Flexible Working Hours by dividing early/late shifts into multiple stages.

Regarding the establishment of a telework environment that allows working at home, since telework started in the Internal Bureau in 2017, its coverage has been expanded and additional terminals have been installed on a step-



Online Commendation Ceremony for "Competition for Initiatives to Promote Working Style Reform in the Ministry of Defense"

by-step basis until FY2020, when it became possible to telework in every organization. In particular, since 2020, many staff members have been teleworking to prevent the spread of COVID-19. From the viewpoint of business continuity in emergencies, the MOD/SDF promotes the establishment of a telework environment through digitalization including the computerization of documents as well as the installation of more terminals.

(4) Development of an Environment that Enables Staff to Realize a Successful Career While Engaging in Childrearing and Nursing Care

The MOD/SDF has developed various schemes, which enable staff to balance work with childrearing/nursing care, such as ensuring substitute personnel for staff who take childcare leave and other leave. In particular, the ministry is encouraging its male staff to take childcare leave to promote their participation in family settings. Since FY2020, the ministry is strongly working to enable all male staff with a newborn child to take childcare leave or time off work for a total of one month or more. Also the target rate of childcare leave acquisition by male staff is set at 30% by FY2025.

The MOD/SDF is also developing an environment that enables staff to balance work life with their family life by distributing e-mail newsletters to help its staff to return

to work smoothly after childcare leave and encouraging staff to use a “childcare form” to facilitate managers’ and the human resources department’s thorough and detailed understanding of the situation regarding childcare.

The MOD/SDF has a system to rehire SDF personnel who have previously resigned mid-career. It reassessed the system so that former SDF personnel who had resigned in their mid-career due to childrearing and nursing care could be reemployed from January 2017. The MOD/SDF started recruitment based on this system in January 2018.

(5) Ensuring Childcare Services

To allow SDF personnel who are rearing children to concentrate on their duties, it is important to ensure childcare services tailored to the irregular working patterns unique to the SDF. Since April 2007, the MOD/SDF has set up workplace nurseries at GSDF Camp Mishuku, GSDF Camp Kumamoto, GSDF Camp Makomanai, GSDF Asaka Camp housing district, MSDF Yokosuka Naval Base district, ASDF Iruma Air Base, Ichigaya district, where the MOD is located, and National Defense Medical College. In the event of emergency operations such as disaster relief, the MOD promotes measures to provide temporary childcare in SDF camps and bases for children of SDF personnel who have no alternative but to attend to duties with their children.



Reference: Work-Life Balance Support Handbook

URL: https://www.mod.go.jp/j/profile/worklife/book/handbook_2021.pdf

VOICE

Using Work-Life Balance Supports

**Lieutenant OKADA Ayaka, Air Patrol Squadron 3, MSDF
(Yamato City, Kanagawa Prefecture)**

I took childcare leave for one year each in 2017 and 2019. After returning to work in July 2020, I am working hard on training exercises to qualify as a captain of a P-1 patrol aircraft while raising my two children. During the exercises, I am always keenly aware of the difficulty of commanding subordinates as a captain. Although it is hard to make decisions one after another in the ever-changing situation in the sky, but it is even harder to convey my intentions to my subordinates precisely and to command them accurately.

At the same time, this may be cliché, but child-rearing is



A family scene (author: second from the left)

also truly challenging. My husband and I have been raising our children cooperatively with the support of our colleagues at work. My husband is not an SDF member, but he understands my work very well. I am also very grateful for everyone at work showing consideration.

Currently, I feel that there is an “image of a P-1 captain” I can aim for precisely because I am balancing child-rearing and training exercises. In order to demonstrate the “true active participation of women” to my juniors as well as show my children that I am a mother they can take pride in, I will manage both my work and home, and proudly say, “I am a mother aiming to be a P-1 captain.”



The author (right) during training

Defense Intelligence Headquarters (Shinjuku Ward, Tokyo)

In March 2020, just after my wife and I became empty nesters by our child's independence, my-father-in-law suffered a cerebral infection and we started to care for him at his house. Although his condition of nursing care level 5 (the most serious level in the government's care insurance system) made us anxious about in-home care, my wife was a homemaker, and we thought we could get by with the help of caregivers and other professionals.

Upon starting the care, we faced the reality that if my wife was fully engaged in it, somebody else needed to handle all the household chores such as cleaning, laundry and preparing meals.

Because we are a family of two, it was natural for me to use paid leave and Flexible Working Hours to set aside time

to do housework and provide care. However, taking paid leave was not sufficient to secure enough time and I found that I could not continue giving care without using other support systems including caregiving leave.

With regard to nursing care in a family, burden sharing is important. If anyone becomes worn out, we cannot keep the happiness of a family. In such a situation, I may not be able to focus on my work.

You never know when you will have to start caring for your parents.

Through my experience caring for my father-in-law, I realized that we should keep in mind that we need to be familiar with the support system in the workplace in advance, obtain the understanding of our colleagues and utilize the maximum benefits of the system without hesitation, not only for balancing work and nursing care but also for our family.



The author chatting with his father-in-law (author: left)



The author's wife caring for her father (oral cleaning)

2 Reform for Promoting Active Participation of Women

For the further expansion of the recruitment and promotion of female personnel, the MOD/SDF has been making various efforts to advance the careers of motivated and qualified female personnel by setting up specific goals with regard to the recruitment and promotion of female personnel under the Action Plan. Moreover, the MOD formulated the “Initiative to Promote Active Engagement of Female SDF Personnel – Aiming for Attractive SDF that Adapts to the Times and Environment” (the “Initiative”) in April 2017 to specify its conceptual policy for promoting the active participation of female SDF personnel.

(1) Significance of Promoting Active Engagement of Female SDF Personnel and Personnel Management Policy

The “Initiative” outlines the significance of promoting the active participation of female personnel and the MOD/SDF personnel management policy. Specifically, with SDF duties becoming increasingly diverse and complex, SDF personnel are required, more than ever, to have multifaceted capabilities including higher levels of knowledge, decision-making ability, and skills. In addition, under a severe recruitment environment due

to the declining birthrate and continuing trend of higher education, it is anticipated that the number of SDF personnel with time and location restraints, including those involved in childcare, nursing care, and other responsibilities, will significantly increase.

In light of these changes, the SDF is required to evolve from a conventional organization with an emphasis on homogeneity among the members, into an organization that is capable of incorporating diverse human resources in a flexible manner.

At present, the largest human resource that the SDF has not been able to fully utilize is women, who account for half of the population targeted for recruitment. Promoting the active engagement of female SDF personnel has the following significance: (1) securing useful human resources; (2) utilizing diverse perspectives; and (3) reflecting values of the nation. For this reason, the MOD/SDF has decided to open up a path for female personnel with motivation, ability, and aptitude to have opportunities to demonstrate their abilities in various fields, and aim for doubling the ratio of female SDF personnel.

In terms of employing and promoting female SDF personnel, the MOD/SDF sets out a personnel management



Second Lieutenant Matsuura, the first female tank platoon leader, on duty (left)

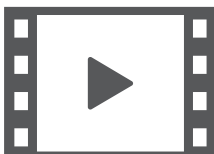


Training flight by an all-female crew



Video: Female GSDF personnel successfully pursuing her dream

URL: <https://www.youtube.com/watch?v=-bcA9G417vU>



Video: Female MSDF personnel performing duties while having enough personal time

URL: <https://www.youtube.com/watch?v=tsk6VAV6LP4>



Video: Female ASDF personnel in action

URL: https://www.youtube.com/watch?v=CzUcZITk_bs&feature=youtu.be

VOICE

Active Participation of Female SDF Personnel

**Lieutenant Colonel NISHIMURA Tomoko,
U.S. Army Cyber Center of Excellence
(Fort Gordon, Georgia, United States)**

I am serving as a liaison officer assisting the development of human resources and capability building at the U.S. Army Cyber Center of Excellence, which carries out research and education related to cyber, electromagnetic spectrum and communications.

In the face of the U.S. Army's world-leading initiatives through trial and error, I am learning first-hand from its scale and speed. I will incorporate the lessons learned from my duty in strengthening the human resource base of GSDF, expand the educational and training opportunities for the friendly competition between Japan and the U.S. across the barriers of language and culture, and foster the personnel protecting the cyberspace together.

**Petty Officer 1st Class NAKAMOTO Yoko, JS Michishio
Ship Officer, MSDF Training Submarine Division 1
(Kure City, Hiroshima Prefecture)**

After the removal of the restriction against female officers serving aboard submarines, I took five months of submarine training, and began serving aboard the training submarine JS Michishio from June 2020.

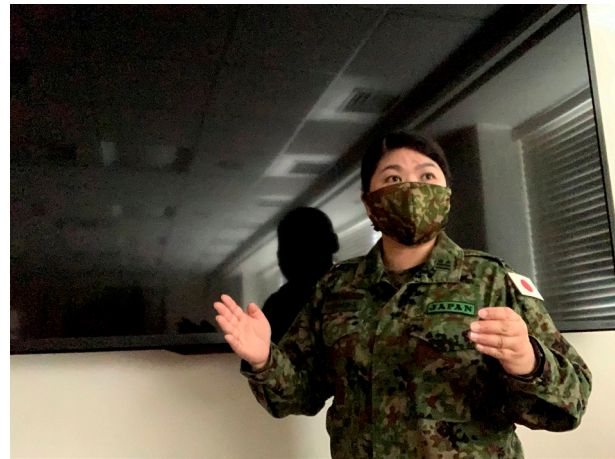
At first, many of my colleagues might have felt perplexity about a female serving aboard a submarine, but now I enjoy my work every day thanks to the considerate and friendly attitude of the fellow crew members. My family is also very supportive, and I am grateful for the kindness of the people around me including my husband and son.

While I currently spend my days learning new things, I hope to build up my knowledge and skills step by step and in a steady way, and carry out my duties cheerfully and in an enjoyable way at any time.

**Lieutenant Colonel KOGA Manami, NATO Headquarters
Consultation, Command and Control Staff
(Brussels, Belgium)**

I currently serve in the command and communications systems department at the NATO Headquarters in Belgium. NATO is cooperating with not only member countries but also partner countries such as Japan on a wide range of fields including cyber and maritime security. Therefore, my primary duty is to produce a standard manual to provide a common vocabulary for relevant countries to use in their communications.

My workplace is very international consisting of military and civilian personnel from various countries. Although both my work and personal lifestyle have changed a lot due to COVID-19, I am working hard while getting help from my colleagues and enjoying online coffee breaks with them.



The author explaining Japan's cyber-related initiatives



The author serving as a duty petty officer aboard the JS Michishio training submarine



The author in front of the NATO Headquarters

I hope my work at NATO can help increase cooperation between Japan and NATO in the future.

policy to ensure equal opportunity between men and women and assign the right person to the right place based on the person's motivation and ability/aptitude.

(2) Removal of the Assignment Restriction of Female SDF Personnel

The MOD/SDF has been reviewing the restriction of assignment of female personnel. With the removal of the restriction on female assignments in submarines in December 2018, the restriction against females was completely removed with the exception of the units where female personnel cannot be assigned for reasons of maternity protection (a part of the GSDF Nuclear Biological Chemical (NBC) Weapon Defense Unit [chemical] and Tunnel Company Units).

With the removal of the restriction on female assignments, the first female fighter pilot and the first female paratrooper went on duty in 2018 and March 2020 respectively. Moreover, female SDF personnel began serving onboard submarines in October 2020.

(3) Expansion of the Recruitment and Promotion of Female Personnel

Under the new Action Plan, efforts will be made for the systematic expansion of the recruitment and promotion of female personnel under new numerical targets for recruitment and promotion that have been revised upward.

a. Female SDF Personnel

As of the end of March 2021, the number of female SDF personnel is about 18,000 (about 7.9% of total SDF personnel). Compared with ten years ago (end of March 2011, about 5.2% of total SDF personnel), this is a rise of 2.7 percentage points, indicating that the ratio of female SDF personnel has been on the rise in recent years.

Regarding the recruitment of female SDF personnel, the targets for the proportion of newly employed female SDF personnel among total newly employed SDF

personnel and the proportion of female SDF personnel among total SDF personnel have increased to 17% in and after FY2021 and 12% or higher by FY2030 respectively. Specifically, in order to increase the number of recruits through the increase in the scheduled number of female recruits, the SDF will actively recruit women, promote their active participation, and improve education, living, and work environments for female SDF personnel.

In addition, with regard to promotion, MDO/SDF aims to increase the proportion of women among SDF personnel with a rank of field officer or higher to 5% or higher by the end of FY2025.

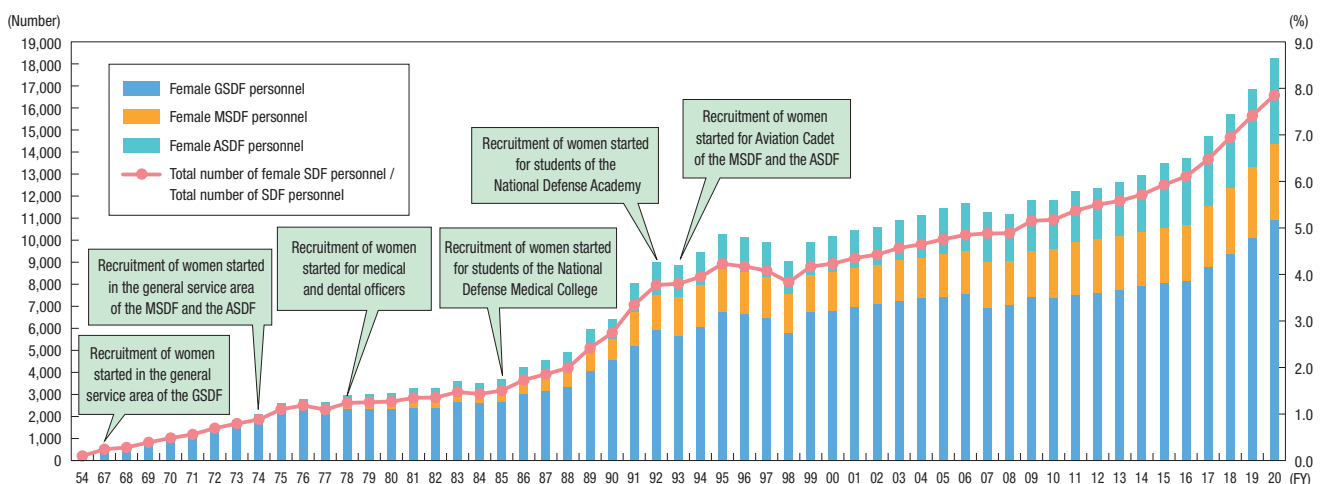
See Fig. IV-1-2-1 (Changes in Incumbent Female SDF Personnel)

b. Female Administrative Officials, Technical and Engineering Officials, Instructors, and Others

As of the end of March 2021, the number of female civilian personnel — administrative officials, technical and engineering officials, and instructors, and others — is approximately 3,500 (about 25.6% of total civilian personnel). Compared with ten years ago (end of March 2011 when females made up 23.3% of the total civilian personnel), this is a rise of 2.3 percentage points, indicating that the ratio of female civilian personnel is on a rising trend in recent years.

With regard to recruitment, in line with the overall government target, the MOD has set up its goal of ensuring that women account for over 35% of recruits in and after FY2021. Regarding promotion, as a goal to be achieved by the end of FY2025, the proportion of women of the Unit-Chief level at the ministry proper or equivalent would be 35%, the proportion of women of the Division-Director level at local organizations and Assistant-Division-Director level at the ministry proper or equivalent would be 10%, the proportion of women of the Division-Director level at the ministry proper or equivalent would be 6%, and the proportion of women of the Designated-Official or equivalent level would be 5%.

Fig. IV-1-2-1 Changes in Incumbent Female SDF Personnel



Note: As of the end of March 2021, the total number of female SDF personnel is 18,259 (approximately 7.9% of the total number of the SDF personnel)

Section 3

Enhancement of Medical Functions

For the SDF to perform its mission, SDF personnel must remain in good health through appropriate health management. Also, it is important for the SDF to make continued efforts to enhance and strengthen its capabilities in military medicine for protecting the lives of the personnel engaging in a variety of services as much as possible.

Under the circumstances where the SDF's missions are becoming more diverse and internationalized, it

is important to appropriately and accurately carry out various medical activities, such as medical support in disaster relief and international peacekeeping activities, and capacity building in the medical field.

The MOD/SDF, therefore, is enhancing and strengthening its medical capabilities so that they can appropriately respond to various emergency events and carry out its multiple missions in Japan and abroad.

1 Enhancing Seamless Medical Care and Evacuation Posture

1 Enhancement of Medical Functions in Various Emergency Situations

In order to respond to various emergency situations, the MOD/SDF will enhance a seamless medical care and evacuation posture from the frontline to the final transport destination, while considering joint operation, in accordance with the MTDP.

Specifically, for the purpose of providing maximum protection for the lives of personnel injured on the frontline, the MOD/SDF will enhance medical functions for seamless implementation of a series of medical care and transportation starting from emergency life support by Frontline Medics¹ and damage control surgery (DCS)² at a medical base equipped with a field operation system³ to safe and speedy transportation to an SDF hospital that is the final destination for complete cure. Other measures necessary for the implementation of the above will be taken, including preparation of materials and equipment necessary for DCS, patient management after

surgery, and the whole body control of patients during transportation, and preparation required for introduction of armored ambulances.

On this occasion, MOD/SDF decides to strengthen the organization of the Joint Staff for control and coordination concerning SDF medical operation on a daily basis.

2 Enhancement of Medical Functions in the Southwestern Region

In the enhancement of seamless medical care and evacuation posture, in light of the geographical characteristics of Japan, with its vast sea area and large number of remote islands, the MTDP places a special focus on the enhancement of medical functions in the southwestern region. Specifically, the MOD/SDF will develop maintenance and evacuation guidelines for medical bases in the region and improve the medical equipment reserve system in main island of Okinawa and smaller islands.

2 SDF Hospitals Serving as Hub Hospitals with Enhanced Functions

The role of SDF hospitals is to admit and treat injured SDF personnel and other persons transported from their area of activity in various emergency situations, while in normal circumstances these hospitals provide medical care to SDF personnel and their families, etc. These hospitals also play the role of educational institutions that train medical personnel to maintain and enhance

their skills.

In accordance with the NDPG and the MTDP, the MOD will continue to concentrate human and medical resources on the consolidation of SDF hospitals with increased performance levels to establish an efficient and high-quality medical care regime by improving their capacity as transfer hospitals with a certain level of

1 "Frontline Medics" are, from among those who are certified as Licensed Practical Nurses (Refer to the Assistant Nurse stipulated in Article 6 of the Act on Public Health Nurses, Midwives, and Nurses [Act No. 203 of 1948]) and Emergency Life-Saving Technicians (refer to the Emergency Life-Saving Technician stipulated in Section 2, Article 2 of the Emergency Life-saving Technicians Act [Act No. 36 of 1991]), those who have completed the training curriculum approved by the council stipulated in Article 4 of the Directives Relating to Emergency Life-Saving Actions (MOD Directive No. 60 of 2016).

2 Hemostasis by pressing/placing gauze on damaged internal organs, suture, etc., and emergency operations to prevent contamination with intestinal tract contents. The purpose is to stabilize the patient's condition to the level where transfer is possible.

3 Mobile operating room sheltered in a large truck with one of the four functions necessary for operation (operation, operation preparation, sterilization and medical supply vehicles). Thoracotomy, laparotomy, craniotomy, and other operations to save lives can be conducted.

VOICE

Voice of Medical Officer Battling COVID-19

**Colonel KAWANO Shuichi, Respiratory Medical Officer,
Self-Defense Forces Central Hospital
(Setagaya Ward, Tokyo)**

I am currently caring for patients infected with the COVID-19 virus at the Self-Defense Forces Central Hospital. The Hospital is one of four designated medical institutions for Type I Infectious Diseases in Tokyo, and thus far we have treated over 700 patients. Some patients have required intensive care and ventilators.

I find great satisfaction in my work as I cooperate together with other medical officers, nurses and doctors, as we all cross the barriers of our specialties to provide a high level of care to our patients 24 hours a day, and help prevent the collapse of

Tokyo's healthcare system. Even so, as we struggle around the clock, there were patients we could not save despite treating them with all our strength, giving me a sense of inadequacy. I have also experienced first-hand the lessons and challenges that can only be understood by those providing treatment, such as the physical and mental burden caused by working for long hours in protective clothing, and the difficulty of team building in such circumstances.

I will continue working to fight the COVID-19 virus, and make use of the lessons I learned here not only in the fight against infectious diseases, but to also enhance the hygienic capabilities of the SDF as a whole.



The author (front left) reviewing an electronic medical record with other medical workers



The author (center) treating a patient suffering from the novel coronavirus

medical care in response to infections, gunshot wounds, and other trauma and injury caused by NBC weapons in addition to general practice. SDF hospitals have been also advancing regional medical care. Some SDF hospitals are designated as secondary emergency medical institutions by local municipalities to accept emergency patients. SDF Central Hospital, in particular, responded to about 5,700 ambulances in 2020.

In response to the spread of the novel coronavirus disease (COVID-19) infection, the MOD/SDF has been accepting COVID-19 patients at SDF hospitals and the National Defense Medical College Hospital (NDMC Hospital) since February 1, 2020. 1,708 COVID-19 patients in total (as of March 31, 2021) have been accepted by the SDF Central Hospital, SDF district

hospitals in Sapporo, Misawa, Sendai, Yokosuka, Fuji, Hanshin, Fukuoka, Sasebo, Kumamoto, Beppu and Naha and the NDMC Hospital. The SDF Central Hospital and the NDMC Hospital in particular have been assigned as Designated Medical Institutions for Type I Infectious Diseases⁴ (each possessing two hospital beds that are in conformity with standards specified by the Minister of Health, Labour and Welfare and are outfitted as depressurized rooms, etc., capable of handling Type I Infectious Diseases⁵) by Tokyo Metropolis and Saitama Prefecture and have extended their acceptance of patients to their general wards in response to the increase in the number of patients.

In order to accelerate vaccination against COVID-19, the SDF opened up their large-scale vaccination centers

⁴ Designated medical institutions for Type 1 Infectious Diseases are designated by the governor as medical institutions to hospitalize patients of Type 1 and Type 2 Infectious disease and the COVID-19 infection (Article 6, Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases [Act No. 114 of 1998]).

⁵ Ebola hemorrhagic fever, Crimean-Congo hemorrhagic fever, smallpox, South American hemorrhagic fevers, plague, Marburg disease, and Lassa Fever (Article 6, Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases [Act No.114 of 1998])



FY2020 drill for accepting large numbers of injured persons (September 2020)



Drill for accepting patients of infectious diseases (November 2020)


in Tokyo and Osaka, on May 24, 2021, and is currently conducting vaccinations.

Using the lessons learned through the activities in response to the spread of the COVID-19 infection, the MOD/SDF is further strengthening its hygiene functions by implementing measures as follows in the first and second 2020 supplementary budgets: preparation of medical equipment including respirators and negative pressure equipment to accept infected patients, ambulances necessary for transportation of infected people, protective clothing necessary for handling COVID-19 and CT diagnosis vehicles and medical equipment that can be deployed to the field for pneumonia diagnosis.

In addition, the SDF Central Hospital and the NDMC Hospital conducted a clinical test of the anti-viral drug favipiravir (Avigan®) for COVID-19. Since March 2020, MOD has gained experience in using Avigan® Tablets for treatment under the framework of compassionate use and also participated in the confirmation process through clinical tests for the effectiveness of Avigan® Tablets necessary for their formal approval as therapeutic medication for COVID-19. MOD/SDF plays an active role not only in the treatment of COVID-19 but also in the development of therapeutic medication.

The SDF Central Hospital and the NDMC Hospital also conduct drills for infectious disease response. For example, the SDF Central Hospital works to establish cooperation procedures with relevant institutions by regularly conducting drills for accepting patients of infectious diseases under the assumption that there are Type I Infectious Disease patients. These drills benefited activities in the face of COVID-19 outbreaks.

In September 2020, the SDF Central Hospital cooperated with the Setagaya Medical Association, the Japanese DMAT, the Metropolitan Police Department, the Tokyo Fire Department, and others as well as the GSDF Eastern Army and the GSDF Medical School to conduct a drill for accepting large numbers of injured persons under the assumption that simultaneous terrorist attacks had occurred during a large-scale sports event. In November 2020, it conducted a drill for accepting patients of infectious diseases to confirm acceptance procedures for novel influenza patient during the COVID-19 epidemic as part of its ongoing efforts to strengthen cooperation with relevant institutions and enhance its capabilities as a medical institution equivalent to a disaster base hospital.

 See Part II, Chapter 4, Section 2-1 (Overview of Defense-Related Expenditures), p. 230



Video: FY2020 drill for accepting large numbers of injured persons
URL: <https://youtu.be/dvXUYqruh-Y>

3 Strengthening the Function of the NDMC

As the only educational institution of the MOD/SDF for the training of SDF personnel who are physicians (medical officers), SDF personnel who are public health and registered nurses (nursing officers) and technical officers, the NDMC plays the role to train and produce the primary medical staff as well as to maintain and improve their skills.

In this context, the NDPG and the MTDP state that the MOD/SDF will improve operations of the NDMC and enhance its research functions, and endeavor to secure high-quality talents.

Specifically, the MOD/SDF will strengthen the system for training of excellent medical and nursing

officers, and improve the conditions for providing high-quality medical care either equaling or surpassing other university hospitals. The MOD/SDF will also enhance research functions of the NDMC Research Institute and collaboration with medical care departments of the GSDF, MSDF, and Air Self-Defense Force (ASDF). Through these initiatives, the MOD/SDF will further enhance the education/research conditions at the college.

The NDMC Research Institute started advanced research of defense medicine in FY2015 and has been conducting research contributing to SDF troop operation, which includes research on explosion trauma and damage caused by shock waves.

4 Enhancement of Education for Medical and Nursing Officers

While greater abilities are required for personnel engaged in medical care, such as medical officers, due to the diversification of missions, less than 90% of medical officer positions have been filled, although the rate has been improving year by year. Such low sufficiency is caused by medical officers leaving the SDF, one of the major reasons of which is the lack of opportunity to engage in medical training and practice. The MOD/SDF continues to implement various measures with diversified career options to prevent medical officers from leaving the SDF by enhancing clinical education after graduation from the NDMC and other institutions, promoting various initiatives for ensuring more opportunities for medical officers to engage in medical practice, helping them acquire and improve specialized knowledge and skills in areas such as infectious diseases and emergency medicine, as well as increasing their motivation for work.

Through these measures, the MOD/SDF is working to improve the sufficiency of medical officers and maintain and improve their medical skills. In the MTDP, the MOD/SDF will continue efforts to improve the sufficiency of medical officers and further promote the appointment of SDF Reserve Personnel who are physicians to handle missions that are expected to increase.

Similar measures are taken for nursing officers to maintain and improve their knowledge/skills through practice at external hospitals, etc.

Moreover, medical personnel and medical staff, such as radiological technologists, clinical technologists, and emergency life-saving technicians, are educated and trained at SDF hospitals, schools and other relevant institutions so that the SDF can perform diverse missions and missions under special circumstances, including international peace cooperation activities and large-scale disasters.

5 Enhancement of Capabilities for Treating War Injury

In order to improve first aid capabilities on the frontline, and damage control surgeries and treatment while transferring the injured, the MOD/SDF has conducted research on relevant initiatives taken by the U.S. Forces and others, carried out reviews for appropriate and accurate life-saving activities, and enhancing education,

training and research, including improvement of capabilities to treat combat injuries.

For the improvement of first aid capabilities on the frontline, since FY2017 the MOD has been providing specific education and training for SDF personnel who are licensed as both Licensed Practical Nurses



Video: Life of NDMC Students
URL: https://youtu.be/dgZ8FQo_jq0

and Emergency Life-Saving Technicians to acquire the necessary knowledge and skills, so that the SDF personnel with these licenses will be able to provide life-saving procedures⁶ to SDF personnel injured in the course of the performance of their missions in the area where the injury occurred prior to their transfer to SDF hospitals and other medical facilities. SDF personnel who have completed this education and training curriculum have been designated as “Frontline Medics” and allocated to units. In FY2019 the SDF started education and training for Frontline Medics to maintain their knowledge and skills necessary for relief treatment.

In addition to frontline relief treatment and other war injury treatment on the ground, based on the MTDP, the SDF will enhance education and training tailored to the characteristics of the units and equipment of the GSDF, MSDF, and ASDF, which include war injury treatment on board ships or aircraft, while promoting development of a training system for medical care on aircraft and teaching materials for improvement of first aid capability. The SDF will also promote development of medical training infrastructure necessary for combat injury education and common to all SDFs.

6 Improving Preparedness Necessary for International Cooperation

The MOD/SDF have dispatched instructors for Field Medical Assistants Courses (FMAC) as part of the UN Triangular Partnership Project (UNTPP) and participated in medical care in overseas disaster areas as part of international emergency rescue operations. They have also actively conducted capacity-building support and joint exercises in submarine medicine, aviation medicine, disaster medicine, and other medical fields for the benefit of individual countries, mainly in the Indo-Pacific region.

In light of the response to the Ebola virus disease outbreak in West Africa in 2014, the MOD/SDF is accelerating training of human resources with expertise to contribute to overseas activities against infectious diseases that could be a global threat and to the development of a framework including the NDMC, while at the same time making various efforts to improve the capabilities to respond to infectious diseases.

Specifically, the MOD/SDF is currently improving the necessary facility equipment at units, the NDMC

Hospital and the SDF Central Hospital. The aims of this improvement are to provide personnel training for the enhancement of capabilities to deal with infectious diseases, improve equipment to transport infectious disease patients and develop readiness for offering medical treatment to patients affected by Type I infectious diseases which are classified as the most dangerous category among known infectious diseases. The SDF Central Hospital and the NDMC Hospital were designated as a medical institution for Type I infectious diseases in April 2017 and March 2019 respectively and have been working to improve capabilities to deal with infectious diseases.

For the future, the MOD/SDF will develop systems necessary for various international cooperation initiatives, which include the upgrading of mobile medical systems that are effective for overseas medical activities and dispatch of SDF personnel to the medical departments of international organizations, the U.S. DoD and others.

⁶ First aid treatment for those with symptoms such as airway obstruction and tension pneumothorax caused by injuries, and other treatments such as administration of analgesic for pain relief.

Measures on Defense Equipment and Technology

Military technologies in recent years are showing remarkable advances. Against the backdrop of such technological advances, contemporary warfare increasingly features capabilities combined across all domains: not only land, sea and air but also new domains, which are space, cyberspace and electromagnetic spectrum. Aiming to improve overall military capability, states are seeking to gain superiority in technologies that undergird capabilities in these new domains.

They are expending large amounts of R&D funds to develop hypersonic guided missiles and other, potentially game-changing weapons that leverage cutting-edge technologies and to conduct research on autonomous unmanned weapon systems equipped with artificial intelligence (AI) and working on their early operationalization. Further technological innovations in quantum technology including quantum computing and quantum cryptography and the information and communication technology (ICT) sector including the

5th generation mobile communication system (5G) will make it even more difficult to forecast future warfare.

As Japan faces increasingly severe financial conditions, while a certain level has been maintained for investment in research and development on defense technology, it is lower than in other countries. While imports of what are increasingly high-performance and complex equipment are remaining at a high level, equipment procurement from domestic companies is trending downward. For these and other reasons, our defense industry and defense technology base are facing difficult circumstances.

Amid such a situation, it is essential to work on (1) reviewing equipment structure, (2) reinforcing technology base, (3) optimizing equipment procurement, (4) strengthening defense industrial base, and (5) promoting defense equipment and technology cooperation in order to ensure a necessary and sufficient defense capability in terms of both quality and quantity for the construction of a Multi-domain Defense Force.

Section 1

Reviewing Equipment Structure

1 Initiatives for Construction of Optimized Equipment Structure

In order to acquire sufficient capabilities for cross-domain operations in view of the aging population with a declining birth rate and the severe fiscal situation, it is essential to further promote initiatives to optimize equipment structure. The Mid-Term Defense Program (FY2019-FY2023; MTDP) provides that the Ministry of Defense (MOD)/Self-Defense Forces (SDF) will work on the following items to build an effective and optimized equipment structure from the perspective of joint operation.

1 Enhancement of Joint Staff Functions

Under the MTDP, the MOD/SDF will examine the current equipment structure and strengthen the functions of the Joint Staff in order to build an effective and rational equipment structure from a joint operation

perspective. Based on this assumption, the MOD/SDF will undertake the building of an equipment structure from the perspective of joint operation at an appropriate time during the MTDP period.

2 Development of Product Families, Standardization of Specifications, Joint Procurement, etc.

Under the MTDP, from an integrated perspective, the MOD strives to reduce expenses incurred in development, acquisition, and maintenance by the development of product families,¹ standardization of equipment specifications, and joint procurement of equipment common to all SDF services. For example, a multipurpose surveillance radar with standardized specifications is being developed as a successor to multiple types of radar

¹ This refers to adding different variations to the functions and performance of equipment to enable them to respond to different operational demands, while standardizing their basic component parts.

used by the GSDF, including coastal radar and low-altitude radar.

3 Suspending Operation of Equipment of Lowered Priority

The MTDP plans to reduce the number of aircraft types, suspend the use of equipment of lowered priority, and

review or terminate projects of low cost-effectiveness.

Therefore, 203mm self-propelled howitzer and other equipment whose priority is low in light of the security environment surrounding Japan will not be replaced. Biological Reconnaissance Vehicles and other equipment that are procured in a small number with low cost effectiveness will be decommissioned while maintaining the capabilities.

2 Initiatives to Make the Most of Limited Human Resources (Manpower Saving and Automation)

In view of the severe security environment surrounding Japan and the rapid development of the aging population with a declining birth rate, it is important to maximize defense capability by effectively utilizing the limited human resources to the utmost. Therefore, the current MTDP plans to actively work on manpower saving and automation of defense equipment.

1 Initiatives for Automation

The MTDP plans to actively promote initiatives towards automation through such means as the introduction of AI to data processing and decision making regarding unit operation, the procurement of unmanned aerial vehicles (UAVs), and R&D of unmanned surface vehicles (USVs) and unmanned underwater vehicles (UUVs).

Therefore, the MOD/SDF, in addition to the procurement of Global Hawk and Ship-Based UAVs of the MSDF, will promote research on remote control-type supporting aircraft technology which provides

support for manned aircraft. In addition, the MOD/SDF plans to promote research on UUV with convertible mission modules capable of performing warning and surveillance and other missions.

2 Initiatives for Manpower Saving

The MTDP plans to actively promote initiatives to save manpower through such means as streamlining in the design of new types of destroyers (FFM) and submarines and use of remote control for radar sites and other equipment. In November 2020, the naming and launching ceremony of JS Kumano under the FY2018 Plan (30FFM) was conducted. Other initiatives include the introduction of patrol vessels that can be operated by a smaller crew (about 30 members) through dedication to intelligence, surveillance, and reconnaissance (ISR) and the consideration of utilizing AI in defense equipment such as research on SAR/ISAR image identification with AI.



Naming and Launching Ceremony of JS Kumano under the FY2018 Plan (30FFM)

Section 2 Reinforcing Technology Base

1 Necessity of Reinforcing Technology Base

Japan's advanced technological strength is the foundation of our defense capability. Ensuring technological superiority over other countries and strengthening the technology base that contributes to the creation of superior defense equipment not only contribute directly to strengthening defense capability but are also of great significance to national security from the perspective of preventing technological ambush.¹ For this reason, countries are devoting their efforts to strengthening their technology base and expending large amounts of research and development funds towards the early operationalization of so-called game-changing technology that will completely transform combat aspects in the future.

See Part I, Chapter 3, Section 1 (Trends Concerning Military Science and Technology), p. 170

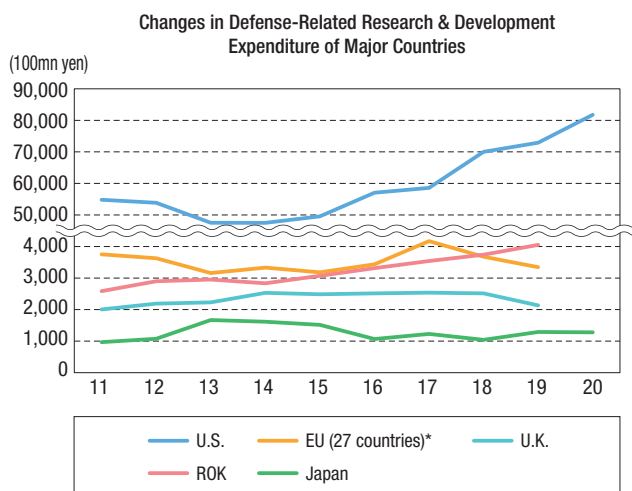
While a certain level has been maintained in Japan's investment in research and development on defense technology, it is lower than in other countries. As a nation,

it is important for Japan to strategically work on ways to ensure technological superiority and strengthen the technology base from the perspective of creating superior defense equipment and ensuring Japan's security. Also, the strengthening of the technology base is a pressing issue. Therefore, it is necessary to further promote research and development domestically and develop and strengthen the technology base for the technology areas on which Japan should focus.

In the cases of defense equipment and technology cooperation, such as equipment procurement and international joint development, it is important to maintain the leading role by owning important cutting-edge technology. This requires not only research and development by the MOD, but also the promotion of research and development by both the public and private sectors together.

See Fig. IV-2-2-1 (Current Status of Research & Development Expenditure)

Fig. IV-2-2-1 Current Status of Research & Development Expenditure



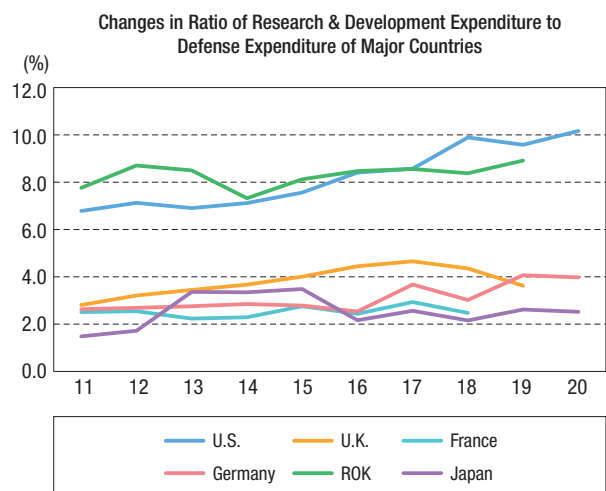
Source: "OECD: Main Science and Technology Indicators"

*For the EU, it is the total of the following 27 countries:

Ireland, Italy, Estonia, Austria, Netherlands, Cyprus, Greece, Croatia, Sweden, Spain, Slovakia, Slovenia, Czech Republic, Denmark, Germany, Hungary, Finland, France, Bulgaria, Belgium, Poland, Portugal, Malta, Latvia, Lithuania, Romania, and Luxembourg

Notes:

- For the calculation of Defense-Related Research & Development Expenditure of Major Countries, the ratio of research & development expenditure to defense expenditure of major countries from the "OECD: Main Science and Technology Indicators" data was used. However Chinese data was not published.
- In addition to each EU country's defense-related research & development expenditure, as part of the European Defence Fund, the EU has announced that it will invest 7.953 billion euros in research & development from 2021 to 2027 (according to the European Defence Agency website).



Source: "OECD: Main Science and Technology Indicators"

"SIPRI Military Expenditure Database ©SIPRI 2021"

Note: The FY2019 data for France has not been included as the figures published by the OECD and the French Ministry of the Armed Forces are still being scrutinized.

¹ An event that causes a dramatic change in the security environment due to unexpected technological progress in another country. The 1957 Sputnik crisis, in which the then-Soviet Union delivered a huge blow to the United States by successfully launching the first human-made satellite, is one such example.

2 Defense Technology Strategy and Related Documents

For the purpose of ensuring Japan's technological superiority, inventing as well as delivering advanced equipment in an effective and efficient manner, and dealing with various policy issues pertaining to defense and civilian technologies, taking account of the National Security Strategy, the MOD formulated the Defense Technology Strategy in 2016, which presented the specific direction for various measures that should be addressed strategically. Based on this strategy, the MOD promotes various measures.

1 Outline of Defense Technology Strategy

The following is an outline of Japan's defense technology strategy.

(1) MOD Technology Policy Objectives

The following two objectives of the MOD technology policy are designed to strengthen the technical

capabilities, which serve as the foundation of Japan's defense capabilities, to make the foundation more robust:

- (i) Ensuring technical superiority
- (ii) Delivering superior defense equipment through effective and efficient research and development

(2) Specific Measures to be Promoted

The following three measures are promoted to achieve the objectives as mentioned above.

(i) Grasping Technological Information

With regard to various scientific technologies that support defense technologies, the MOD grasps the current situation and trends both in and outside of Japan, including dual-use technology² in the public and private sectors and cutting-edge scientific technology. In addition, the MOD develops and publishes the Medium- to Long-Term Defense Technology Outlook (see Paragraph 2 below) to identify advanced technology fields, which have the potential to become game changers.

Column

Strengthening R&D Systems for Advanced Technologies

With drastic changes to the nature of warfare occurring against a backdrop of advances in military technology, it has become more important than ever to utilize Japan's outstanding science and technology to strengthen the country's technological base and produce defense equipment. Achieving this requires producing advanced technologies that have future potential and ensuring they can be used for defense equipment. It also requires a system that enables everything from the discovery and development of innovative and budding technologies to the realization of equipment that will change the way we fight.

The Acquisition, Technology & Logistics Agency (ATLA) has established the Director for Advanced Technology Strategy in the Technology Strategy Division of the Technology Strategy Department. This individual leads research and analysis into domestic and overseas advanced technology trends. In addition, the Technology Collaboration Support Division has been established in the Technology Strategy Department to discover and promote the use of promising technologies in universities, private companies, and national research and development institutions. The structure is to promote the use of advanced technologies and accelerate their practical application for defense purposes.

In addition to these adjustments to the Technology Strategy Department, ATLA's research institutes have been reorganized and the Future Capabilities Development Center has been

newly established. These actions will produce a research system for producing next-generation equipment that is not limited to the land, sea, and air equipment domains, but can respond to changing combat conditions across multiple domains, including new domains such as space, cyberspace, and the electromagnetic spectrum.



Parliamentary Vice-Minister of Defense Onishi, and Director of the Future Capabilities Development Center Doshida, install a sign for the Acquisition, Technology & Logistics Agency's Next-Generation Equipment Research Institute

² Technology that can be used for both civilian and defense purposes

(ii) Development of Technologies

The MOD will promote research and development based on the “Research and Development Vision” (see Paragraph 3 below). At the same time, the MOD also promotes research and development that serve as the foundation of defense force building, technology exchange with relevant domestic/overseas agencies, and “Innovative Science & Technology Initiative for Security” (see 4-2) and intermediary research to apply their results to equipment, etc.

(iii) Protection of Technologies

The MOD implements technology control for proper technology transfer to prevent situations in which Japan’s technology leaks without the country’s intention, which would undermine the maintenance of peace and security in the international community or the ensuring of Japan’s technological superiority. The MOD also establishes intellectual property management taking into account the transfer of defense equipment and promotes the utilization of intellectual property.

2 Medium- to Long-Term Defense Technology Outlook

The Medium- to Long-Term Defense Technology Outlook presents an outlook of the technologies that can be applied to equipment expected to be established in roughly the next 20 years, and indicates technology

fields that need to be developed in order to ensure Japan’s technological superiority. It is expected that making this Outlook public will facilitate the integration of superior civilian advanced technologies and the development of technologies outside of the MOD aimed at defense equipment applications. Review is now underway for taking a more strategic approach to important technologies, including technologies pertaining to new domains and other potentially game-changing technologies such as AI.

3 “Research and Development (R&D) Vision”

The “Research and Development (R&D) Vision” presents principles on R&D, technological challenges, and roadmaps on R&D of the technologies required for our future defense capability for the purpose of conducting advanced R&D systematically from a mid-to-long term viewpoint.

The MOD publishes R&D Vision, and shares them with the defense industry, with the aim of increasing predictability for relevant companies, promoting prior investment, and realizing more effective and efficient research and development by maximally exploiting the investment. So far, the MOD has published the “R&D Vision on the Future Fighter Aircraft” (2010), and the “R&D Vision on Future Unmanned Equipment: Focusing on Unmanned Aerial Vehicle” (2016), and the “Research and Development (R&D) Vision—Toward Realization of the Multi-Domain Defense Force and Beyond” (2019).







3 Initiatives for Research and Development

1 Strengthening the Research and Development System

Defense technology and civilian technology have become increasingly borderless, raising expectations for innovations being generated by the synergy. It has become

difficult to produce truly excellent defense equipment unless we turn our eyes to the technology in a wide range of areas that is possessed domestically in addition to the technology in the hands of the existing defense industry and take care to develop them.

In order to strengthen the research and development

		<p>Reference: R&D Vision (Efforts in the domains of the electromagnetic spectrum)</p> <p>URL: https://www.mod.go.jp/atla/en/policy/pdf/rd_vision_exp20203_01.pdf</p>	
		<p>Reference: R&D Vision (Efforts on wide-range continuous warning and surveillance including in space)</p> <p>URL: https://www.mod.go.jp/atla/en/policy/pdf/rd_vision_exp20203_02.pdf</p>	
		<p>Reference: R&D Vision (Efforts on cyber defense)</p> <p>URL: https://www.mod.go.jp/atla/en/policy/pdf/rd_vision_exp20203_03.pdf</p>	

system for advanced technologies, the Future Capabilities Development Center was established in FY2021 under the Acquisition, Technology & Logistics Agency to conduct research and development that leads to the creation of new fields and functions that cut across existing fields that surpass existing defense equipment from the utilization of the results of advanced basic research to the production of actual defense equipment.

Furthermore, in the same fiscal year, the MOD will establish a new test and evaluation facility as the “Iwakuni Test Evaluation Facility (provisional name)” of the Naval Systems Research Center based on the “Basic Policy on the Relocation of Governmental Organizations”³ to efficiently and effectively conduct research and development on UUVs, etc., using dual-use technologies as well as to be available for use by the civilian sector,

including local institutions for higher education.

In addition, in order to strengthen the system for early identification of innovative technology and their development, the office of the Director for Advanced Technology Strategy was created to engage in planning the research and analysis of domestic and overseas advanced technologies and the Technology Collaboration Support Division was created to promote the utilization of the results of advanced research in universities, private-sector companies, national research institutions, etc.

2 Shortening Research and Development

Technological progress is about to fundamentally change how security should be managed, and major states endeavor to develop weapons that leverage cutting-edge

VOICE

Development Starts on Japan's Fighter (F-X)

SUGIMOTO Akira, Chief of F-X Program Office, Aircraft & Missile Systems Division, Mitsubishi Heavy Industries, Ltd.

Mitsubishi Heavy Industries has been supporting the Ministry of Defense across a wide range of ground, maritime, and air defense fields, as a close partner in defense manufacturing and technical base. Regarding the fighter jets for JASDF, we have engaged in development, manufacturing and MROU (Maintenance, Repair, Overhaul and Upgrade) activities at Komaki South Plant in Aichi Prefecture.

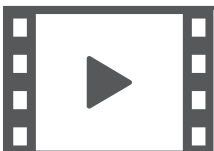
In October 2020, we were awarded a contract from the Ministry of Defense to develop the F-X, a successor to the F-2. Today's fighter aircraft serve a wide range of missions and require a very high level of integration. That is why we have formed the all-Japan F-X Engineering Team “FXET” comprised of engineers from eight domestic manufacturers to bring together Japan's best defense technical expertise. At our team's launch ceremony held in December 2020, we confirmed our firm unity and commitment to the development of the F-X, which is the first fighter development in about

thirty years since the F-2 program, in the presence of many attendees from the MOD and defense industry partners.

Currently, we are getting into full swing in concept design, the first step of the F-X development. This fighter will incorporate all the domestic cutting-edge technologies and expertise gained until now. In addition, the F-X must have freedom of modification to enable the incorporation of future advanced technology, allowing the F-X to maintain its superiority throughout its long service life. We will continue to devote ourselves as an all-Japan team to the successful development of the F-X.



The FXET team's launch ceremony



Reference: R&D Vision (Efforts on underwater defense)

URL: https://www.mod.go.jp/atla/en/policy/pdf/rd_vision_exp20203_04.pdf



Reference: R&D Vision (Efforts on standoff defense capability)

URL: https://www.mod.go.jp/atla/en/policy/pdf/rd_vision_exp20203_05.pdf



³ Decided at the Advisory Council on Vitalizing Towns, People and Jobs on March 22, 2016

technologies. The MOD is also working to greatly shorten research and development periods by focusing research in promising technical fields and rationalizing the research and development process in order to ensure technological superiority in strategically important equipment and technology fields such as technologies in new domains and potentially game-changing cutting-edge technologies such as AI, and other important technologies.

Specifically, the MOD has been making efforts to greatly shorten the research and development periods of a Hyper Velocity Gliding Projectile Intended for the Defense of Remote Islands, unmanned underwater vehicles (UUV) with convertible mission modules, standoff electronic warfare aircraft and other equipment through the use of initiatives such as block approach and modularization. New technologies such as AI and lasers are the subject of demonstrations by the Acquisition, Technology & Logistics Agency to enable users to imagine how these technologies will be used, while a concrete image of future equipment is being developed by collecting information on their technical feasibility from private companies and other parties at an early stage and fully analyzing the information.


The MOD has been promoting the rapid practical application of technologies with short innovation cycles, such as AI, VR and drones, by utilizing cutting-edge, commercially ready technologies and aligning with

operational needs, as the Programs for Rapid Practical Application of New Technologies, since FY2019.

3 Development of the Next-Generation Fighter Aircraft

The Fighter (F-X) Development Division was newly created in the Acquisition, Technology & Logistics Agency in April 2020 to efficiently conduct the development of the F-X to be a successor of the F-2 fighter jet. Development has begun in October 2020 with the contract being concluded with Mitsubishi Heavy Industries, Ltd. as a prime company in charge of integrating the fighter as a whole.

In developing the F-X, the MOD has decided to advance this program with necessary support and cooperation from the U.S., such as selecting the U.S. company Lockheed Martin as the candidate for an integration support company in December 2020, and starting a new project on data link connection with the U.S. from FY2021 to ensure interoperability between Japan and the U.S. Also, the MOD has continued discussions with the US and the U.K. to pursue the possibility of collaboration on the F-X at a system level such as engine and avionics in order to reduce development cost and technical risk.

 See Part I, Chapter 3, Section 1 (Trends Concerning Military Science and Technology), p. 170

4 Active Utilization of Civilian Technology

1 Strengthening Technology Cooperation with Relevant Domestic and Overseas Entities and Collaboration with Relevant Ministries and Agencies

The ATLA and domestic research institutions, such as universities and independent administrative institutions, proactively engage in research collaborations and technological information exchanges in order to ensure that advanced civilian technology is incorporated and efficient research and development is conducted.

Domestically, in order to create excellent defense equipment through the utilization of advanced technologies and effectively and efficiently conduct R&D, the MOD is working to ensure cross-sectoral and substantial coordination at the Council for Science, Technology and Innovation (CSTI)⁴ and other control

tower meetings⁵ based on the Integrated Innovation Strategy 2020 (Cabinet Decision on July 17, 2020). The ministry also actively participates in the Council for Integrated Innovation Strategy⁶ established for its promotion in order to further enhance collaboration with relevant ministries and agencies, national research and development agencies, industry, universities, and other parties. Furthermore, the MOD will further strengthen human exchange with research institutes, etc. in order to understand trends of civilian technologies for complementary and synergistic improvement of technological capabilities.

 See Fig. IV-2-2-2 (Major Technological Cooperation with Universities and National Research and Development Agencies, etc.)

As international cooperative activities, the MOD will continue Japan-U.S. joint research and engineer exchanges, and continuously consider diverse possibilities

4 One of the important policy meetings aimed at the planning and general coordination of comprehensive and basic science & technology innovation policies under the leadership of the Prime Minister and ministers in charge of Science & Technology policy, at a level higher than individual ministries

5 The IT Strategy Headquarters, the Intellectual Property Strategy Headquarters, the Headquarters for Healthcare Policy, the Space Development Strategy Headquarters, the Headquarters for Ocean Policy, and the Geospatial Information Utilization Promotion Committee in addition to the CSTI

6 Meeting of all ministers of state under the leadership of the Chief Cabinet Secretary for checking, sorting, and cross-sectoral and substantial coordination, and promotion of items that are included in the Integrated Innovation Strategy 2019 (Cabinet Decision on June 21, 2019) and that require coordination among the control towers related to innovation

Fig. IV-2-2-2

Major Technological Cooperation with Universities and National Research and Development Agencies, etc.

No.	Partner	Primary fields/technologies of cooperation
1	Japan Aerospace Exploration Agency (JAXA)	Aerospace field <ul style="list-style-type: none"> ● Dual-band infrared sensor ● Hypersonic flight technology ● Ultra-wideband electromagnetic waves measurement technology
2	National Institute of Information and Communications Technology (NICT)	Electronics, information and communications field <ul style="list-style-type: none"> ● Cybersecurity technology ● Quantum cryptography and communication
3	Japan Agency for Marine-Earth Science and Technology (JAMSTEC)	Marine field <ul style="list-style-type: none"> ● Marine drone system ● Underwater mobile communication
4	Yokohama National University	● Research on cooperative control algorithm for multiple unmanned vehicles
5	Japan Coast Guard	● High frequency surface-wave radar

through continued opinion exchange with other countries at various opportunities while closely observing their technology strategies, etc.

2 Identifying and Developing Innovative Technologies and Their Seeds


In FY2015, the MOD launched a competitive research funding program called “Innovative Science & Technology Initiative for Security” to publicly seek and commission basic research on advanced civilian technologies, which are expected to contribute to future research and development in defense areas. A total of 95 research projects were awarded⁷ by FY2020, and this program was expanded in FY2017 in order to enable the awarding of larger-scale and longer-term research projects. The program will continue to run on a similar scale in FY2021 (total budget of about 10.1 billion yen).



In the basic research areas, free thinking of researchers leads to innovative and creative results. For this reason,

it is necessary to assign maximum value to freedom of research when sponsoring research, so that, for example, researchers will be able to publish all of their research results to have a wide range of academic discussions. Hence, in this program, the MOD will neither restrict contractors’ publication of research results, nor designate research results as confidential, never providing any confidential data to researchers. In actuality, some research results have already been published through oral presentations, publications, etc.

Active utilization of advanced civilian technology through such programs is not only essential for securing the lives and peaceful livelihood of the Japanese people into the future, but is also beneficial for the development of Japan’s science, technology and innovation in non-defense areas as well, similar to how investment in innovative technology by the Defense Advanced Research Projects Agency (DARPA) of the United States facilitated advances in science and technology as a whole including civilian technology, such as the development of the Internet and GPS. From this perspective, the MOD intends to promote relevant measures and strives to raise awareness of this program that contributes to ensuring the freedom of study and its sound development.


Bridging Research was launched in FY2020 to expedite the identification and development of promising, advanced technologies from the results of basic research under the Innovative Science & Technology Initiative for Security and other sources, enhance their readiness level, and apply them to the research and development of equipment. Bridging Research will be conducted aggressively in FY2021 with the aim of helping to generate equipment that will be gamechangers in the future.

 Fig. IV-2-2-3 (FY2020 Awarded Research Projects for the “Innovative Science & Technology Initiative for Security” Program)


Video: ATLA Ground Systems Research Center PR video

URL: <https://www.youtube.com/watch?v=dK8jeyRxjM>



Video: ATLA Naval Systems Research Center PR video

URL: <https://www.youtube.com/watch?v=AjeWDhvXa1o>



⁷ For the research projects awarded under the Innovative Science & Technology Initiative for Security (a competitive research funding program), see the ATLA website (<https://www.mod.go.jp/atla/funding/kadai.html>).

Fig. IV-2-2-3 FY2020 Awarded Research Projects for the “Innovative Science & Technology Initiative for Security” Program

	Research Title	Brief Summary	Representative Institution for the Project
Large-scale research projects (Type S): Seven projects	Research for underwater hybrid sensing applying laser reflection	Work on basic research related to visualization technologies that have higher accuracy and overwhelmingly wider exploration ranges than conventional sonars and cameras, and new underwater exploration technologies that use laser to grasp sea floor conditions that have been visualized.	Japan Agency for Marine-Earth Science and Technology (national research and development agency)
	High-throughput and exhaustive property exploration using composition-graded multi-component bulk samples for high-temperature structural materials	Build a test environment that automatically acquires a large volume of material compositions and properties in order to realize a heat-resistant alloy materials database that is outstanding both in quality and quantity, and to confirm the validity of the data that was collected by applying it to materials in jet engines that reach high temperatures.	National Institute for Materials Science (national research and development agency)
	High-Power Extreme Solid-State Laser in Giant Micro-photonics	By studying the raw materials used for lasers, their surface treatments, atomic level direct bonding methods and nonlinear wavelength conversion, etc., aim to realize the world's top high-power and high-brightness terahertz waves* extreme solid-state laser within a desktop-size (*electromagnetic waves with frequencies around 10^{12} Hz).	Institute of Physical and Chemical Research (RIKEN)
	Development of compact, robust terahertz 3D imaging system	Aim to realize a compact 3D visualization device that can be mounted on robots by clarifying the specific mechanism for the phenomenon in which light emitted by lasers is converted into terahertz waves (electromagnetic waves with frequencies around 10^{12} Hz) and by manufacturing a compact, high power light source that utilizes this phenomenon.	Institute of Physical and Chemical Research (RIKEN)
	Development of inversion-type MOS ^{*1} Ga ₂ O ₃ Transistor	Conduct basic research on transistors using gallium oxide semiconductor with superior properties for ultra-high-voltage and high-current switching operation which have been difficult in the past.	Novel Crystal Technology, Inc.
	Development of <i>Operando</i> ^{*2} Electron Microscopy Techniques using AI Image Analysis	By applying images acquired from state-of-the-art electron microscopes to image analysis via AI that utilizes multiple computers, aim to realize an electron microscope measurement system that can make observations in real environments.	Japan Fine Ceramics Center
	Smart fuzzing ^{*3} scheduling with reinforcement learning	Conduct basic research aimed at realizing a system that uses AI to detect unknown security bugs that are not recognized by developers or operators, before they are exploited by attackers.	Ricerca Security, Inc.
Small-scale research projects (Type A/O): 14 projects	Surface Structural Modification in Nano Scale and Functional Control of Soft-Materials by Irradiation of Hyperthermal AO – Atomic Oxygen – ^{*4} Beam	Plastic materials' surface collided by atomic oxygen with hyperthermal energy could change the morphology of the surface in nano-meter scale. This is a basic research to understand the mechanisms of such nano-scale structure formation. In addition, the electromagnetic absorption characteristics change caused by atomic-oxygen-induced nano-scale surface structure are investigated.	Japan Aerospace Exploration Agency (national research and development agency)
	Improvement of frictional resistance reduction effect by multi-scale bubbles	In order to reduce frictional resistance during navigation, aim to reduce frictional resistance to less than half and dramatically improve the propulsion performance of ships, etc., by developing a new method that also combines and releases micrometer-scale bubbles from the hull, as opposed to the existing method of releasing millimeter-scale bubbles.	National Institute of Maritime, Port and Aviation Technology (national research and development agency)
	Mechanism and Design Technology for crashworthiness of randomly-oriented FRP ^{*5}	Aim to clarify impact resistance mechanisms by experimentally and theoretically elucidating the process of occurrence and progression of a variety of damages during impacts for fiber-reinforced composite materials that are made by randomly laminating fibers within the resin.	National Institute of Maritime, Port and Aviation Technology (national research and development agency)
	Development of compact proton-precession-magnetometer ^{*6} using spintronic devices	Aim to realize a magnetometer with a size of 1 cm ² or less that detects weak magnetic field with high sensitivity and high accuracy by utilizing the nature of electron spins.	SpinSensingFactory Corp.
	Research on detection of minute amounts of chemicals by using semi-conductive carbon nanotubes	With new sensors that utilize carbon nanotubes that have carbon atoms in a tubular shape, conduct basic research to selectively detect only specific gases while also trying to detect minute amounts of chemical substances that are difficult to detect with conventional technologies.	Toray Industries, Inc.
	Cyber Reasoning Systems based on Deep Reinforcement Learning	As the first step to realize automatic responses to advanced cyber attacks, study the basic theory of a system that can automatically detect and respond to cyber attacks by AI.	Institute of Information Security
	Basic research on security enhancement of quantum-noise randomized stream cipher	Experimentally demonstrate stream ciphers with higher security than existing ciphers by utilizing the unpredictable randomness of quantum noise.	Tamagawa University
	Research on separation technology of clutter ^{*7} for exploration of buried targets by synthetic aperture radars	This study aims to establish analysis technology for quickly identifying targets by reducing noise from non-target sources, which is a hindrance in the radar-using explorations via aircraft and observation satellites for substances that are buried underground.	Japan Aerospace Exploration Agency (national research and development agency)
	Development of smart mechanical-metamaterials based on 4D printing technology	Conduct basic research for the creation of new materials that can be created with 3D printers and that can change to arbitrary shapes when environmental changes such as heat and light are applied.	National Institute for Materials Science (national research and development agency)
	Technology development on ultra high-temperature fatigue test of SiC ^{*8} fiber-reinforced type CMCs	Aim to establish a testing method in order to clarify the process of material deterioration, for composite materials that are expected to be used in aircraft jet engines, in an ultra-high temperature environment of 1,500°C.	National Institute for Materials Science (national research and development agency)
	Development of analytical methods for determination of trace impurities in Wide Band Gap Semiconductor ^{*9} wafer using LA-ICP-MS	Aim to establish a new analysis method that enables analysis of solid-state materials as is in order to investigate the amounts of trace impurities that contribute to the malfunctioning of semiconductor devices.	Toray Research Center, Inc.
	Control of infrared-radiation spectra by nano-structural design	Conduct basic research that aims to control the infrared radiation spectra on surfaces by realizing world-class thin films that can refract infrared rays and by laminating those thin films.	Japan Fine Ceramics Center
	Basic study on application of wireless power transfer (WPT) technology in sea water based on electrically coupled systems	Towards the realization of wireless power transfer systems on the sea and under seawater, conduct basic research on wireless power transfer that uses the electrically coupling system based on approximating effect of electrodes and others by the seawater.	Ryutech Corp.
Basic research of resonance compensation type coreless ultralight induction motor with wireless power receiving function	Establish the basic technologies for ultra-lightweight motors that can wirelessly receive power by significantly suppressing the energy released outside of the motor as heat or magnetic forces when the motor rotates so as to achieve high output/high efficiency and also to use the motor coil to receive power.	YT Corp.	

*1 Inverted MOS channel: A current path of the inversion layer at MOS (Metal Oxide Semiconductor) interface formed by gate-voltage.
 *2 *Operando* (observation): Observing on-location in an actual reaction or operating environment.
 *3 Fuzzing: A method of discovering software bugs via intentionally raising exceptions by providing programs under test with input data that has a variety of modifications that may cause problems.
 *4 Hyperthermal AO: Atomic Oxygen having higher kinetic energy than that at normal temperature.
 *5 FRP: Fiber Reinforced Plastics
 *6 Proton-precession-magnetometer: A magnetometer that utilizes the phenomenon that precession of protons generates a nuclear magnetic field with resonance frequency that is proportional to the magnitude of the external magnetic field.
 *7 Clutter: Unnecessary radio waves generated by radar waves reflecting off something other than the target.
 *8 SiC: Silicon Carbide
 *9 WBGS: Wide BandGap Semiconductor. A semiconductor that requires more energy to allow electrons to pass through it, and which have the advantage of increasing the electric field's break strength.

Section 3

Optimizing Equipment Procurement

1 Project Management throughout Equipment Life Cycle

1 Acquisition of Defense Equipment through Focused Project Management

As defense equipment is becoming more sophisticated and complex, its entire life cycle (concept study, research and development, mass production, deployment, operation and maintenance) cost has a tendency to increase in recent years. It has become extremely important to streamline acquisition throughout the life cycle of equipment and to establish a systematic management to realize the streamlining in order to efficiently acquire equipment of assured quality at appropriate cost in a required timeline as planned. Therefore, since the establishment of ATLA in October 2015, the Department of Project Management in ATLA undertakes project management throughout the life cycle of equipment upon selecting important equipment, and promotes efforts to realize the optimized equipment acquisition.

Specifically, the MOD has selected 21 items for major programs designated for project management and 12 items for semi-major programs for project management¹ as of the end of March 2021. For major programs designated for project management, the MOD designates a Project Manager (PM) dedicated to each specific major program, after which project management for that program is conducted by an Integrated Project Team (IPT), which is composed of officials from relevant divisions within the MOD.

So far (as of the end of March 2021), for each of the 31 items that have been selected for major and semi-major programs, the MOD has formulated an Acquisition Strategy and an Acquisition Plan (hereinafter referred to as “Designated Item Plans”), which specify the basic matters necessary to systematically implement project management, such as the purpose of the acquisition program, acquisition policy, and life cycle cost.

Furthermore, in principle, ATLA annually confirms the implementation status of the Designated Item Plans, and endeavors to promote appropriate project management reflecting the latest situation by conducting analysis and evaluation, and thus reviews the Designated Item Plans. In September 2020, analysis and evaluation of the acquisition programs

were implemented for the 23 items for which the Designated Item Plans had been developed.

 See Fig. IV-2-3-1 (Equipment for Project Management and Equipment for Semi-Project Management)

2 Initiatives to Promote and Strengthen Project Management

(1) Past Initiatives

The following initiatives have been implemented to promote and strengthen project management.

a. Cost and Schedule Management Using WBS

For certain kinds of equipment, etc., produced in Japan, the MOD promotes the introduction of a management method to visualize the progress of work and cost generated by component (Work Breakdown Structure [WBS])². Specifically, MOD endeavors to manage costs and schedules to detect the signs of cost increase and schedule delays early so that swift measures can be taken by such means as utilizing the new contract method introduced in June 2019 (incentivized risk-sharing management contract system; see 2.3).

b. Method for More Accurate Cost Estimate

Life cycle cost has been estimated based on actual cost data of similar equipment developed or introduced in the past. However, as a larger amount of cost data is needed for a more accurate estimate, the MOD promotes the establishment of a cost database by collecting cost data and accumulating them into a database.

c. Accumulation and Development of Expertise

For further improving the management skills of PMs and enhancing human resources among those who engage in project management, the MOD provides opportunities to study project management methods from overseas and the private sector on a regular basis.

(2) Future Initiatives

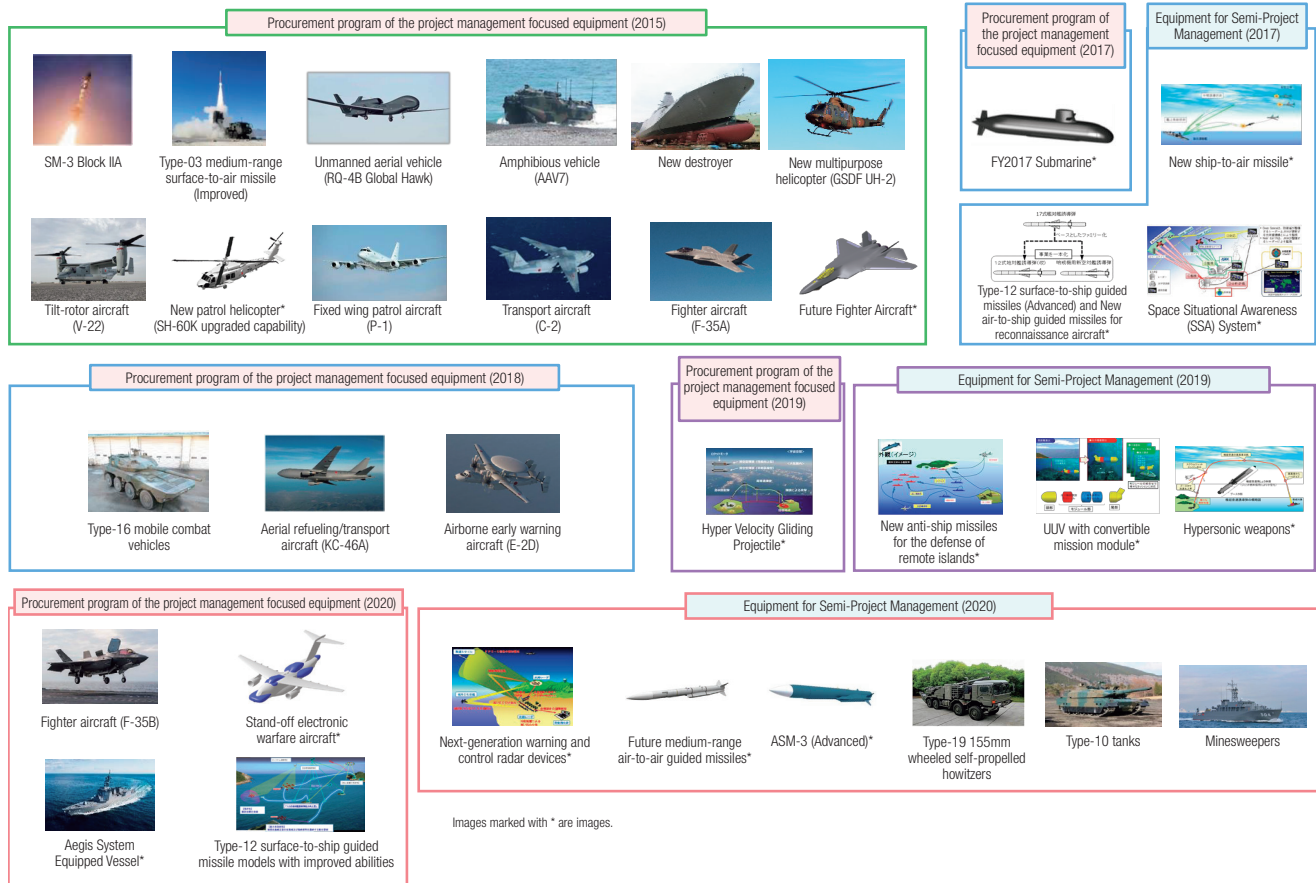
In order to further promote effective and efficient equipment acquisition, the MOD needs to enhance the effectiveness and flexibility of project management throughout equipment life cycles. To this end, under the Mid-Term Defense Program (MTDP), the MOD/SDF will take new initiatives, including incorporating successful

¹ A semi-major project is an acquisition project of specific equipment with a limited application of project management without the designation of PM and IPT, focusing on risks in functions, performance, costs, schedules and other risk factors as in the case of equipment for project management.

² WBS is a hierarchical structure used to practice project management that systematically divides the project into manageable units, in which the schedule and cost of each deliverable (components and services) are allocated.

Fig. IV-2-3-1

Equipment for Project Management and Equipment for Semi-Project Management



Chapter 2 Measures on Defense Equipment and Technology

examples in the civilian sector into the manufacture of defense equipment, actively adopting the competitive bidding method and other contracting methods that contribute to the utilization of private sector knowledge and expertise, and tightening cost controls.

In this regard, the MOD will expand the items subject to project management and strive to adjust the standards

for the specifications and the review of project plans with consideration of life cycle costs. Furthermore, for more efficient acquisition, during the equipment selection phase, the MOD will implement thorough life cycle cost estimation, and analysis of alternatives, and secure binding obligations against company principals.

2 Improving the Contract System and Other Related Matters

1 Reviewing Acquisition Systems

For the purpose of promoting acquisition reform, which is a prompt response to swiftly changing surroundings, the MOD has been holding meetings of the Comprehensive Acquisition Reform Committee since 2007, in addition to the Contractual Systems Study Groups held since 2010 to review acquisition systems. Since FY2016, a special research officer system³ has been adopted in order to surely bring the review results to fruition.

2 Long-Term Contracts, etc.

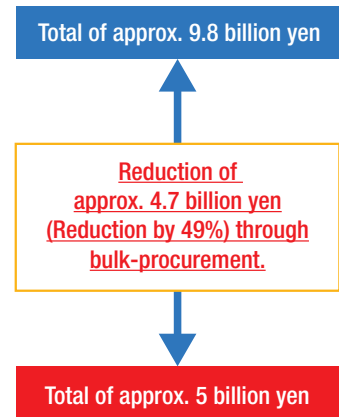
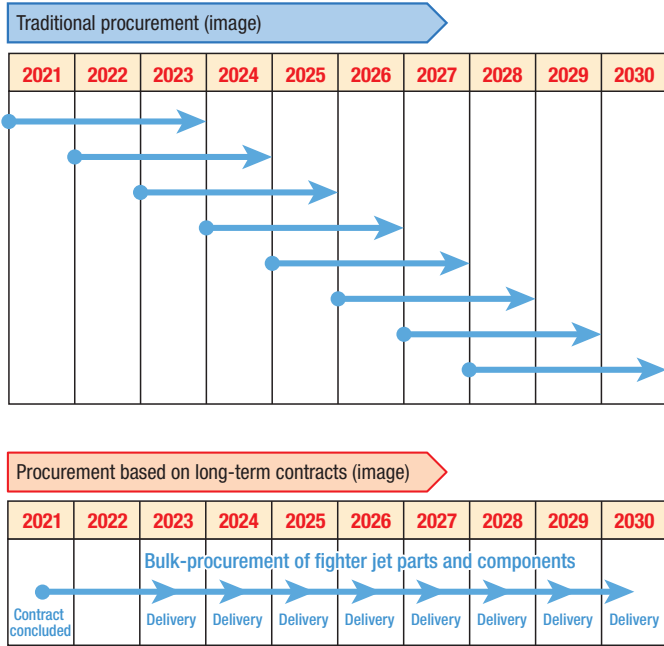
The production of defense equipment requires a significant amount of time. Therefore, if a certain amount is to be procured in bulk, a contract for more than five years is needed in many cases. With regard to defense equipment and services, economies of scale⁴ tend not to work mainly due to the following reasons: (1) the MOD is the only customer; and (2) companies that provide such defense equipment, etc., are limited. In addition, it is difficult for companies to systematically move forward

³ This is a system to conduct research, which contributes to the acquisition system of defense equipment, by inviting experts, such as associate professors from different universities specializing in the areas of concern, in order to review and reconsider an effective procurement system, based not only on the viewpoints of the MOD personnel but also on theories that have been proposed in the field of business administration and economics.

⁴ "Economies of scale" refers to the cost advantage that arises with an increased output of a product. For example, costs per unit can be reduced by a bulk purchase of materials.

Fig. IV-2-3-2 Image of Long-term Contracts and the Cost Reduction Effect

Bulk-procurement of fighter jet (F-2) component repair in the FY2021 budget



with their businesses with a high degree of predictability, which is peculiar to the defense industry.

For these reasons, the upper limit of acts that incur national debt prescribed in the Public Finance Act as within five years in principle was changed to within ten years for specific equipment through the enactment of the Long-term Contract Act.⁵ The introduction of this change regarding long-term contracts will make stable procurement possible, leading to the realization of the systematic improvement of defense capability. At the same time, for companies, given that the procurement amount will be assured, the systematic use of personnel and equipment, as well as cost reductions due to bulk orders, will be made possible.

See Fig. IV-2-3-2 (Image of Long-term Contracts and the Cost Reduction Effect)
Part II, Chapter 4, Section 2-3 (Initiatives for Increasing the Efficiency of Procurement), p. 233

In addition, by realizing longer-term multiple-year contracts utilizing the Private Finance Initiative (PFI) Act,⁶ the planned acquisition and execution of budgets is achieved through the standardization of investment amounts of the national expenditure, and certain benefits are obtained, such as cutting equipment procurement costs, by reducing risks for those taking orders and by promoting the entry of new suppliers. As projects

using the PFI Act, the MOD launched a total of approx. 25.4 billion yen the “project of development and operation of X-band satellite communications” in January 2013 and the “project of operation and management of private ships” in March 2016.

In addition, regarding procurement of certain equipment with which little competitiveness can be expected due to its characteristics, and companies that work on cost reduction using the MOD’s programs, the MOD promotes limited tendering contracts while ensuring transparency and fairness as well as clarifying and putting the subject into patterns, from the perspective of the implementation of smooth and efficient procurement, and the enhancement of the company’s predictability.

Specifically, in acquiring new destroyers (FFM),⁷ the MOD adopted a procurement method in February 2017 that selects the party that has made the best proposal with respect to the MOD’s requirements as the procurement counterparty, with the runner-up also involved in designing and building facilities as a subcontractor. This made it possible to acquire the new destroyers efficiently equipped with the necessary functions and to maintain and strengthen the construction technology base. The MOD concluded a proposal agreement in April 2017 and decided on a procurement counterparty and a subcontractor in August 2017.

⁵ “Special Measures Law Concerning the Term of Expenditure Based on the Obligatory Assurance of National Subsidization for Specific Defense Procurement” (enacted in April 2015. An act for its partial revision to extend the effective period by five years was enacted in March 2019.)

⁶ Act on Promotion of Private Finance Initiative

⁷ New destroyers that combine improved multimission capabilities and compact hulls

3 Decrease Procurement Cost and Improve Companies' Incentives to Reduce Cost

With regard to the procurement of defense equipment, the cost is tending to increase because a large variety of equipment has no market price. Based on those characteristics, it is necessary to achieve both the reduction of procurement cost and improvement of companies' incentives to reduce cost simultaneously.

To achieve this, the ATLA is applying the incentivized risk-sharing management contract system, which was

introduced in June 2019, to some projects.

Under this system, the public and private sectors jointly manage the performance and progress of the contract and manage the cost and minimize risks. When the cost is reduced, part of the reduction is awarded to the contractor. This system is aimed at reducing the price while incentivizing the contractor to reduce the cost.

Since April 2020, a system to give an incentive for cost reduction has been in operation in order to fairly evaluate cost reduction efforts by companies.

3 Initiatives Aimed at Increasing the Efficiency of Procurement, and Other Related Initiatives

1 Effective and Efficient Maintenance and Replenishment

With regard to periodic maintenance of defense equipment, the MOD has been working to improve efficiency by extending the maintenance interval, after making sufficient efforts to ensure safety. Moreover, the MOD is working to expand umbrella contracts such as performance based logistics (PBL)⁸ from the perspective of improving the equipment's operational availability and keeping long-term costs reduced. In the FY2021 budget, the MOD is pursuing cost reduction by purchasing a certain quantity of UH-60J rescue helicopters and by utilizing long-term contracts for the bulk purchase of airframe structural parts for the F-2 fighter aircraft among others.


 See Part II, Chapter 4, Section 2-3 (Initiatives for Increasing the Efficiency of Procurement), p. 233


Fig. IV-2-3-2 (Image of Long-term Contracts and the Cost Reduction Effect)

2 Achieving Further Efficiency in the Acquisition of Defense Equipment

When acquiring defense equipment, the MOD aims to reduce development, acquisition, and maintenance expenses through the development of product families, standardization of equipment specifications, joint procurement of equipment common to multiple SDF services, etc., in addition to a review of the contract system. For example, in the FY2021 budget, cost reduction is expected by using existing equipment in the development of a sonar for future submarines.

In addition, the MOD has been facilitating the compilation of a database on the breakdown of

procurement prices and actual price of major equipment in the past. The MOD expects this database to be utilized not only to verify the validity of procurement prices, but also to enhance the accuracy and efficiency of life cycle cost estimation for new equipment.

 See Part II, Chapter 4, Section 2-3 (Initiatives for Increasing the Efficiency of Procurement), p. 233

3 Efforts to Increase Fairness and Transparency

The MOD implements measures for making contracts more appropriate and strengthening checking functions to promote the enhancement of fairness and transparency in relation to the acquisition of equipment and materials.

As a part of the effort to “make public procurement more appropriate” across the whole government, the MOD continues to carry out the introduction and expansion of a comprehensive evaluation bidding system⁹ and make bidding procedures more efficient. In addition to these, based on reflection on the past, strengthening system investigation, reviewing penalties, ensuring the effectiveness of supervision and inspection, and other measures have steadily been carried out in order to prevent recurrence of such incidents as overcharging and falsified results of equipment testing by defense-related companies in 2012. Through these measures, the MOD strives to surely prevent recurrence of scandals, enhance fairness and transparency, and make contracts more appropriate.

In addition, ATLA carries out multilayered checks through both internal and external checking systems and checks and balances within the organization – namely, ATLA further enhances internal inspections by the inspection and audit department, and through deliberations in the Defense Procurement Council,

⁸ PBL is a contract method that involves payment of compensation according to the level of equipment performance achieved in terms of availability ratio and stable stock. It has achieved positive outcomes upon application to the maintenance and servicing of equipment in Western countries.

⁹ Unlike the automatic bid system, which focuses only on price, this is a system whereby the successful bidder is determined on the basis of a comprehensive evaluation that includes both the price and other elements. This method is adopted when it is appropriate to carry out such procedures as evaluating the technological elements.

consisting of external experts, and defense inspection conducted by the Inspector General's Office of Legal Complaints. Moreover, ATLA has also improved its

education department and strives to enhance compliance awareness by providing thorough education pertaining to compliance for ATLA personnel.

4 Promoting Initiative towards Rationalization of Foreign Military Sales (FMS) Procurement

FMS is a form of U.S. security assistance authorized by the Arms Export Control Act (AECA) etc. that may enable the U.S. allies and others to purchase defense equipment and services from the U.S. government. The characteristics of FMS include: (1) pricing is an estimate, (2) payments are made in advance in principle and balanced out after fulfillment, and (3) the delivery date is an estimate. This program allows Japan to procure equipment with a high level of confidentiality that cannot be generally purchased through Direct Commercial Sales and highly capable equipment. Therefore, FMS is critical to strengthen Japan's defense capabilities.

Meanwhile, there are FMS-related challenges, such as late delivery and late case closure. As the FMS procurement amount is hovering at a high level in recent years, the governments of Japan and the U.S. have been actively working together to make improvements in these challenges. Specifically, the ATLA and Defense Security Cooperation Agency (DSCA) held the Security Cooperation Consultative Meeting (SCCM) to discuss the challenges over FMS procurement, five times since 2016.

At the 4th SCCM in January 2020, as for late delivery and late case closure, ATLA and DSCA agreed to make efforts such as the timely confirmation of the status of

delivery and case closure on each item. As the result of stricter management of FMS cases through Japan-U.S. cooperation including these efforts, the amounts of late delivery and late case closure as of March 31, 2020 was approximately 16.6 billion yen and 33.2 billion yen respectively, a reduction of approximately 16.0 billion yen (approximately 49%) and 16.1 billion yen (33%) for the amounts of late delivery and late case closure respectively.

At the 5th SCCM in January 2021, as further efforts for late delivery and late case closure, ATLA and DSCA agreed to make efforts such as strengthening case management for major platform cases and maintaining and strengthening efforts to systematically take measures to address and eliminate causes of late delivery and late case closure after analyzing them. DSCA also agreed regarding transparency in pricing to provide guidance to the relevant organizations in the U.S. Department of Defense on providing cost information and would provide assistance to solve the various issues arising from FMS-procured items' cost transparency. The MOD will continue to strengthen the posture of managing FMS procurement¹⁰ and take other measures to promote the rationalization of FMS procurement.

¹⁰ In FY2021, the Implementation Management/Promotion Section was established in the Foreign Military Sales Office, ATLA, to manage FMS procurement.

Section 4

Strengthening Defense Industrial Base

Strong industrial base is essential for ensuring the production and a high operation rate of high-performance equipment. For this purpose, the MOD established the Strategy on Defense Production and Technological Bases in June 2014 to maintain and strengthen the base. Based on the National

Defense Program Guidelines (NDPG),¹ etc., the ministry will make efforts towards making the defense industrial base more resilient, so that it can effectively respond to a changing security environment. For example, since 2019, the MOD has arranged meetings to exchange views with the industry.


1 Current Situation of Japan's Defense Industrial Base

The term “defense industrial base” refers to the human, physical, and technological bases that are essential for the production, operation, sustainment, and maintenance of defense equipment required for the MOD/SDF's activities. In Japan, most of the base is covered by companies (the defense industry) that manufacture defense equipment and associated items. Therefore, a broad range of companies² that possess special and advanced skills and facilities are involved in the defense production and technological bases.

Meanwhile, the degree of defense demand dependence (the ratio of defense-related sales that account for all company sales) is approximately 3% on average,³ indicating that defense business is not the primary business in many companies. Furthermore, unit costs and maintenance/sustainment costs tend to increase due to low-volume, high mix production and the sophistication and complication of defense equipment. For this reason, Japan's

defense industrial base faces issues, such as difficulties in maintaining and passing on skills and techniques, and withdrawal of some companies from defense business because work quantity is decreasing due to a decrease of procurement volume.

In addition, as the realignment of the Western defense industries and international joint development are making progress, Japan formulated the Three Principles on Transfer of Defense Equipment and Technology in April 2014. However, improvement of international competitiveness has become a challenge for Japan's defense industry, because it has developed based on the production of defense equipment only for the SDF.

 See Fig. IV-2-4-1 (Changes in Maintenance and Upgrade Expenditures for Equipment, etc.)
Section 5-1 (Three Principles on Transfer of Defense Equipment and Technology), p. 456

2 The Strategy on Defense Production and Technological Bases

1 Context of Formulation of the Strategy on Defense Production and Technological Bases, etc.

For the purpose of maintaining and strengthening Japan's defense production and technological bases, which is an important and essential element supporting Japan's defense capability, the “Strategy on Defense Production and Technological Bases” was formulated in June 2014. The Strategy responded to the National Security Strategy and the 2013 NDPG, replacing “Kokusankahoshin (guideline for domestic development/production).”⁴

 See Reference 1 (National Security Strategy [Outline])

2 Overview of Defense Production and Technological Bases

(1) Significance of Formulation of the Strategy on Defense Production and Technological Bases

“The Strategy on Defense Production and Technological Bases” has made the following three points clear: (1) the context of the formulation of the strategy on defense production and technological bases and where this strategy stands; (2) characteristics of defense production and technological bases; and (3) changes in the environment surrounding defense production and technological bases.

(2) Goals and Significance of Maintaining and Strengthening Defense Production and Technological Bases

Through maintaining and strengthening defense production and technological bases, the MOD intends to (1) ensure

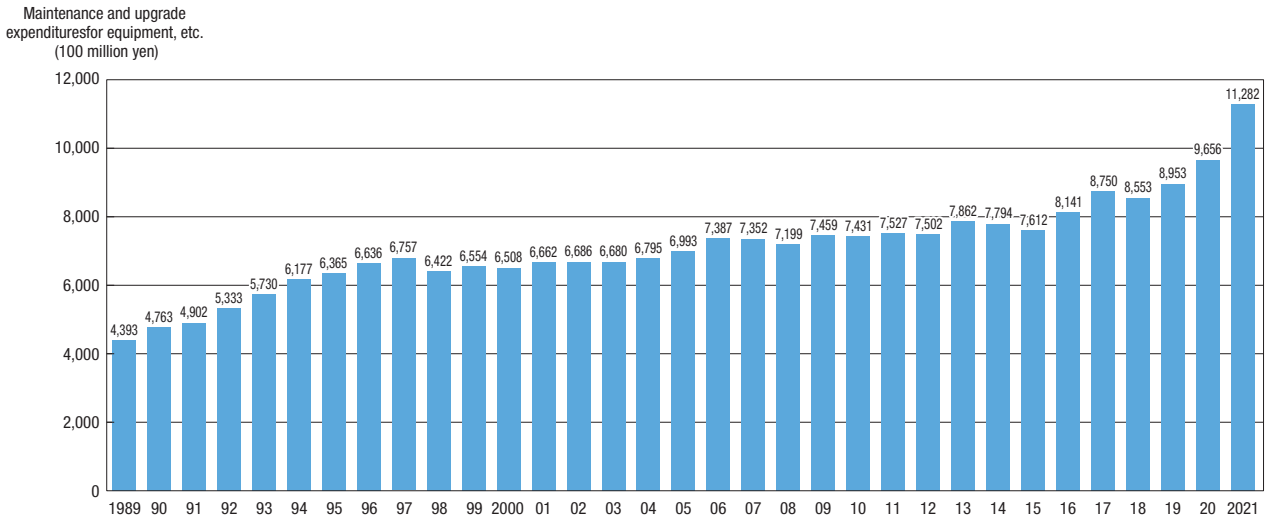
¹ See Part II, Chapter 2, Section 2.

² For example, it is said that approximately 1,100, 1,300 and 8,300 companies are involved in the manufacture of fighter aircraft, tanks and destroyers, respectively.

³ According to the survey of defense demand dependence based on sales performance conducted in FY2019 (150 defense-related companies responded), the ratio of defense demand dependence fell from the approximately 5% average in the previous year because a larger number of companies with low defense demand dependence responded. Although relatively small in scale, some companies possess important technologies for supporting the defense industry with over 50% of the defense demand dependence, in which case the scale of defense demand has a significant impact on the management of these companies.

⁴ The basic guideline for production and development of defense equipment, the development guideline for defense industry, and the stimulation guideline for R&D (Directive July 16, 1970)

Fig. IV-2-4-1 Changes in Maintenance and Upgrade Expenditures for Equipment, etc.



Note: 1 "Maintenance and upgrade expenditures for equipment" refers to the budget for repair costs for equipment, consumable goods costs, and service costs with each service of the SDF (referring to the amount calculated by excluding repair costs for the extension of vessel life and modernization of aircraft from the repair costs of each SDF unit).
 2 For FY2019 and FY2020, expenditure for the Three-Year Emergency Response Plan for Disaster Prevention, Disaster Mitigation, and Building National Resilience are included.
 3 The amounts represent contractual figures.

sovereignty of security, (2) potentially contribute to increasing deterrence capability, and maintain and improve bargaining power, and (3) contribute to the sophistication of the domestic industry in Japan driven by cutting-edge technology.

(3) Basic Viewpoints for Promoting Measures

For the promotion of measures, the MOD takes into account the following basic viewpoints: (1) establishing long-term partnership between the private and public sectors; (2) strengthening international competitiveness; and (3) ensuring consistency with efficient and optimized acquisition of defense equipment.

(4) Defense Equipment Procurement Methods

With regard to defense equipment procurement, currently multiple methods, such as domestic development, international joint development and production, licensed domestic production, utilization of commercially produced goods, and imports, are adopted. These methods directly affect the defense production and technological bases. According to the characteristics of defense equipment, the MOD appropriately selects acquisition methods, including international joint development and production, which have become more agile and flexible due to the Three Principles on Transfer of Defense Equipment and Technology.

(5) Measures for Maintaining and Strengthening Defense Production and Technological Bases

In order to maintain and strengthen defense production and technological bases, the MOD will promote the following

measures with a focus on variation and efficiency, while considering Japan's severe fiscal condition: (1) improvement in the contract system; (2) initiatives in research and development; (3) promotion of defense equipment and technology cooperation; (4) initiatives for defense industrial organizations including the building of robust production and technological bases through understanding actual situations of the supply chain; (5) strengthening of the MOD's functions through the establishment of ATLA,⁵ etc.; and (6) collaboration with other relevant ministries and government agencies.

(6) Current Situation and Courses of Action for Each Defense Equipment Sector

With regard to the main defense equipment sectors (such as land equipment, supplies, etc., ships, aircraft, explosives, guided weapons, communications electronics and command control systems, unmanned equipment, space and cyber systems), the MOD will analyze the current situation of defense production and technological bases. At the same time, based on the priority matters for developing the SDF's structure indicated in the 2013 NDPG, the MOD will present the future direction of the maintenance and strengthening of defense production and technological bases and the acquisition plan for each defense equipment sectors, and thereby, seek to increase predictability for companies.

3 Initiatives toward Strengthening of Defense Industrial Base

1 Past Initiatives

Based on the Strategy on Defense Production and

Technological Bases, the MOD has implemented various measures contributing to the maintenance and strengthening of the defense industrial base, such as

⁵ The ATLA was established on October 1, 2015.

improving the contract system, including the enactment of the Long-term Contract Act, and the establishment of ATLA, which integrated the organizations involved in the defense equipment procurement.

In addition, the following new measures are also taken in ATLA: (1) formulation of Defense Technology Strategy, etc. for ensuring the technological superiority, and implementation of the “Innovative Science & Technology Initiative for Security” (see Section 2); (2) formulation of the Acquisition Strategic Plan for promoting project management, and improvement of contract systems (see Section 3); (3) grasping the supply chain in the defense industry and responses to risks in order to maintain and strengthen the defense industrial base (see Paragraph 2 below); and (4) participation of Japanese companies in the international F-35 fighter aircraft program and defense equipment and technology cooperation involving joint research and development with other countries (see Section 5).

2 Initiatives Based on the NDPG

In order to strengthen Japan’s defense industrial base, which is essential to the production, operation, sustainment and maintenance of defense equipment, the MOD will work on the following initiatives based on the NDPG, etc., while considering the orientation of the defense production and technology strategy.

(1) Reforming the Existing Contract System towards Creating a Competitive Environment among Companies

Japan’s defense industry is in a less competitive environment as there are many defense equipment items that only one company can produce. To address this issue, the MOD will review the existing contract system towards creation of a competitive environment among companies by actively evaluating initiatives and results which contribute to strengthening the competitiveness of the defense industry and cost reduction, as well as giving appropriate incentives based on the evaluation result.

(2) Strengthening Risk Management of Supply Chain for Defense Equipment

The procurement of defense equipment involves not only prime companies that directly contract with the MOD but also supplier companies in a broad range of fields and sizes, which contract with the prime companies. The chains of these companies (supply chains) are the basis of Japan’s defense industry. However, these supply chains are confronted with risks, such as supply disruption due to withdrawing or bankruptcy of some manufacturing companies. In order to deal with the risks, the MOD is taking measures in order to maintain and strengthen the supply chains.

Past supply chain surveys revealed the presence of small and medium-sized enterprises (SMEs) that have a high dependency rate on defense equipment. In the supply chain survey conducted by the end of FY2019,⁶ key suppliers holding irreplaceable technologies were identified. Additionally, vulnerabilities became apparent, such as a concentration of orders to a certain supplier. Based on the survey results, the MOD is creating a database of the results of the supply chain survey, and building a regular monitoring system for early identification of risks, such as supply disruption.

Furthermore, the MOD is making efforts to identify SMEs that have excellent technologies/products and initiating support in FY2021 for business transfer when an enterprise in the supply chain withdraws from the business. The MOD will also accurately deal with the vulnerabilities in the supply chain and strengthen the supply chain through initiatives such as evaluation of the possibility of application of innovative technologies represented by the 3D printer and AI to the manufacturing process of defense equipment.

(3) Further Industrial Participation of Japan’s Defense Industry in Sustainment and Maintenance of Imported Equipment

Industrial participation in the sustainment and maintenance business of imported equipment is productive for the strengthening of Japan’s industrial base. For this purpose, it is important to pursue participation in the sustainment and maintenance of F-35A fighter aircraft, Osprey, and other imported equipment and benefits for domestic companies through further promotion of joint R&D of high-capability equipment with the United States and other countries.⁷

(4) Promoting Appropriate Overseas Transfer of Defense Equipment under the Three Principles on Transfer of Defense Equipment and Technology

The government as a whole will work on necessary improvement in implementation of related rules for promoting appropriate overseas transfer of defense equipment. At the same time, the MOD will strengthen intellectual property management, technology control and information security to prevent leakages of important technologies regarding defense equipment.

a. Initiatives for Necessary Operational Improvement

The MOD, in cooperation with relevant ministries and agencies, will work on necessary improvement in implementation of related rules based on the Three Principles on Transfer of Defense Equipment and Technology, which are the operational standards for the Foreign Exchange and Foreign Trade Act. As a result, the MOD will enhance predictability for the defense industry and will promote appropriate and smooth equipment transfer.

⁶ By the end of FY2019, the MOD conducted a supply chain survey of 60 major defense equipment items.

⁷ SM-3 block IIA, jointly developed by Japan and the United States, is subject to FMS procurement, but Japanese companies have received contracts for manufacturing about half of the components, including those procured by the United States.

Specifically, it is necessary to improve the implementation of relevant systems and procedures, which include rationalization of the handling of basic marketing information necessary for early business talks at international trade shows, etc.,⁸ in order to ensure the smooth provision of such information.

b. Preventing Leakage of Key Technologies

(a) Intellectual Property Management

Through the application of more appropriate contract provisions regarding intellectual property, the MOD will accurately grasp intellectual property generated through R&D, etc., to promote the clarification of public or private belongings and prevention of leakages of key technologies to abroad. The ministry will also present options regarding the opening or closing of intellectual properties based on the characteristics of the technology and promotes appropriate management for each option.

(b) Technology Control

The MOD is working to prevent technology leakage by such means as ensuring prompt and proper assessment of technological sensitivity based on the importance and superiority of the technologies, which is needed in the examination of the propriety of overseas transfer of defense equipment and technology. Also, in order to prevent leakages of sensitive technologies, the MOD, in cooperation with relevant ministries and agencies, promotes studies on reverse engineering countermeasure technologies, such as black box constitution.

(c) Strengthening Information Security

For Japan's defense industry to participate in international businesses, it is necessary to respond to increasing threats of cyber attacks. With the aim of strengthening information security measures, the MOD will review the information security standard applicable to contractors handling the MOD's information to be protected.⁹

In order to further encourage companies to consider entry into defense procurement business and facilitate their business with defense-related companies in Japan and abroad, it is important to improve the predictability of the necessary security measures for the companies. For this purpose, the MOD will develop an information security guidebook that comprehensively defines security measures that will normally be required for concluding a contract, which involves the handling of information to be secured, with the MOD in advance.

(5) Other Initiatives to Achieve Efficiency and Strength

Other than the above-mentioned initiatives, the MOD/SDF will undertake measures such as making the equipment

manufacturing process efficient and thoroughly reducing cost and will strive to make Japan's defense industry base efficient and resilient while foreseeing possible realignment and consolidation of businesses that may occur as a result of these measures.

3 Cooperation/Collaboration with the Industry

The maintenance and strengthening of Japan's technological and industrial base are essential for production, operation and maintenance of defense equipment. For the effort of "Reinforcing Technology Base" and "Strengthening Defense Industrial Base" that are provided in NDPG and MTDP, cooperation between the MOD and the industry is indispensable.

In this context, in October 2019, Defense Minister Kono and executives of the Japan Business Federation exchanged opinions on a wide range of themes, including international situations and defense policy in addition to defense equipment policy, and discussed the strengthening of public-private cooperation in general. Since November of the same year, ATLA and the Defense Industry Committee of the Japan Business Federation had exchanged opinions on eight occasions on "Overseas Transfer of Defense Equipment and Technology," "Maintaining and Strengthening Supply Chains," "Aggressive Utilization of Advanced Civilian Technology," "Strengthening Information Security," and other issues. The outcome of the sessions was reported to Defense Minister Kishi and executives of the Japan Business Federation and received their approval in December 2020.

The MOD will continue the initiatives for strengthening public-private cooperation, including opinion exchange with the industry in order to strengthen the defense industrial and technological bases as is explicitly stated in the NDPG.



Defense Minister Kishi receiving the report on the outcome of the exchange of opinions between ATLA and the Defense Industry Committee of the Japan Business Federation (December 2020)

⁸ In October 2018, the Q&A section of the Ministry of Economy, Trade and Industry website made it clear that information on the performance of goods and other matters that is used in early stage business talks and that does not include "specific information necessary for design, manufacture or use," such as design information and production technique, is not subject to regulation under the Foreign Exchange Act. At the request of companies, the MOD is currently confirming the range of information included in data created by a company that may be disclosed to the public and handled as publicly known technology available to an unspecified large number of people.

⁹ Information subject to "Sensitive" or "For Official Use Only" in the MOD and information created using such information.

Section 5

Defense Equipment and Technology Cooperation

Based on the Three Principles on Transfer of Defense Equipment and Technology, Japan promotes cooperation in defense equipment and technology with other countries in order to contribute to the maintenance and strengthening of defense technological and industrial bases, as well as contributing to the promotion of our national security, peace and international cooperation. Japan will continue to realize effective defense equipment and technology cooperation through the strengthening of information gathering such as the needs of its counterparts, cooperation including assistance for maintenance and repair of equipment, and strengthening of cooperative posture between the public and private sectors.

Based on the National Security Strategy formulated in December 2013, the Three Principles on Transfer of Defense Equipment and Technology¹ and its implementation guidelines were formulated in April 2014 as clear principles adapted to the new security environment. Under the principles, the MOD will

contribute to peace and international cooperation more than ever, while actively promoting measures necessary for maintaining the peace and stability of the region and firmly defending Japan through active defense cooperation with the United States, which is Japan's ally, and other countries.

An appropriate overseas transfer of defense equipment and technology contributes to further active promotion of the maintenance of international peace and security. Such transfer also contributes to strengthening security and defense cooperation with Japan's ally, the United States as well as other countries. Furthermore, it contributes to maintaining and enhancing Japan's defense production and technological bases, thereby contributing to Japan's enhancement of defense capability, given that international joint development and production projects have become the international mainstream.

 See Reference 55 (Three Principles on Transfer of Defense Equipment and Technology)

1 Three Principles on Transfer of Defense Equipment and Technology

1 Main Contents of the New Three Principles

(1) Clarification of Cases Where Transfers Are Prohibited (the First Principle)

The cases where overseas transfers of defense equipment are prohibited are clarified as follows: (1) in the case of violating the obligations under treaties and other international agreements that Japan has concluded; (2) in the case of violating the obligations based on the Resolution of the United Nations Security Council; or (3) in the case of transferring to countries in conflict.


(2) Limitation to Cases Where Transfers May Be Permitted As Well As Strict Examination and Information Disclosure (the Second Principle)

The cases where transfers may be permitted are limited to (1) cases that contribute to the active promotion of peace contribution and international cooperation, (2) cases that contribute to the security of Japan, or other cases. The Government will conduct strict examination on the appropriateness of the destination and end user, and on the extent of the concerns that the overseas transfer of such equipment and technology will raise for Japan's security, whilst ensuring transparency. In addition, it has

been decided that important cases would be deliberated at the National Security Council and along with this, information concerning the cases that were deliberated would be disclosed.

(3) Ensuring Appropriate Control regarding Extra-Purpose Use or Transfer to Third Parties (the Third Principle)

Overseas transfers of defense equipment and technology will be permitted only in cases where appropriate control is ensured, and the Government will in principle oblige the government of the recipient country to gain its prior consent regarding extra-purpose use and transfer to third parties. However, in cases where it is judged appropriate for the active promotion of peace contribution and international cooperation, cases involving participation in the international systems for sharing parts, and cases where parts are delivered to a licensor, appropriate control may be ensured with the confirmation of the control system at the destination.

 See Reference 56 (The First Principle "The Cases Where Transfers Are Prohibited," the Second Principle "Limitation to Cases Where Transfers May Be Permitted," and the Third Principle "Ensuring Appropriate Control")

¹ The term "defense equipment" is deemed appropriate for the title of "Three Principles for the Transfer of Defense Equipment and Technology," since possible articles of overseas transfers help with peace contribution and international cooperation as was seen in the example of the provision of bulldozers and other items belonging to the SDF to disaster-stricken countries. Similarly, due to the fact that there is provision of technology in addition to goods, the term "transfer" was adopted rather than "export."

2 Deepening Relationships with the United States regarding Defense Equipment and Technology Cooperation

1 Joint Research and Development, etc.

Since 1992, Japan has implemented 25 joint research projects and one joint development project with the United States. At present, six joint research projects ((1) Comparison of Operational Jet Fuel and Noise Exposures, (2) Chemical Agent Detector-kit Colorimetric Reader, (3) High-Temperature Case Technologies, (4) Next Generation Amphibious Technologies, (5) Mission Partner Gateway eXtended, and (6) Modular Hybrid Electric Vehicle System) are in implementation.

In addition, with regard to the transfer of parts for Patriot PAC-2, software and parts, etc. for the Aegis System and F100 engine parts that are installed in F-15s and F-16s from Japan to the United States, Japan has affirmed since July 2014 that these overseas transfers fall under cases that may be permitted, based on deliberations at the National Security Council.

 See Part III, Chapter 1, Section 2-2-2 (Missile Defense of the United States and Japan-U.S. BMD Technical Cooperation), p. 270 Reference 20 (Japan-U.S. Joint Research and Development Projects)

2 Production, Sustainment and Maintenance of Common Equipment between Japan and the United States

(1) Participation of Japanese Industry in the Production of the F-35A fighter aircraft and the Establishment of Regional Maintenance, Repair, Overhaul and Upgrade (MRO&U) Capability

In December 2011, Japan selected the F-35A fighter aircraft to be the successor to the F-4 fighter aircraft. At the same time, the Government decided to procure 42 aircraft from FY2012 onwards and to have Japanese industries participate in its production, aside from several completed aircraft, which will be imported.² In light of this decision, the Japanese Government has been working to enable the involvement of Japanese industries in the manufacturing process in preparation for the acquisition of F-35A fighter aircraft from FY2013 onwards. So far the Japanese companies have participated in the Final Assembly and Check Out (FACO) for airframe and engines, and the manufacture of some engine parts (19 items), radar parts (7 items), and Electro-Optical Distributed Aperture System (EODAS)³ parts (3 items).

For the procurement of F-35A fighters in FY2019 and after, the MOD compared the unit price assuming the participation of domestic companies in the production with the import price of completed aircraft. Since the latter was lower, the Government decided to import completed F-35A fighters in order to promptly procure the necessary number while at the same time efficiently strengthening Japan's defense capabilities under the severe fiscal circumstances.

Later, however, as a result of cost reduction efforts by the manufacturers, including improvement in the manufacturing process and reduction of person-hours through work skill improvement, it was confirmed that the FACO by domestic companies would make the price lower than importing completed aircraft. For this reason, for the FY2019, FY2020 and FY2021 procurement, the MOD decided to procure F-35A fighters finally assembled and completed by domestic companies.⁴

The continuing participation of domestic companies in the manufacturing of F-35 fighters is meaningful in that it ensures operational and maintenance bases as well as the sustainment, development and advancement of fighter-related technology bases through working with cutting-edge fighter technologies and knowhow, which will eventually contribute to strengthening of the defense technological and industrial bases.

As global operation of F-35 fighter aircraft is anticipated, the U.S. Government plans to establish maintenance depot (regional MRO&U Capability) mainly for airframes and engines in the North America, Europe, and the Asia-Pacific regions.

In December 2014, with regard to regional MRO&U in the Asia-Pacific region for the F-35 fighter aircraft, the U.S. Government announced the following decisions: (1) Regional MRO&U Capability for airframes will be provided by Japan and Australia with both capabilities required not later than early 2018; (2) with regard to the regional MRO&U Capability for engines, initial capability will be provided by Australia by early 2018, with Japan providing additional capability at least 3-5 years later.⁵ In February 2019, the U.S. government announced the assignment of MRO&U capability in the Asia-Pacific area for certain avionics components of the F-35 fighter to Japan. These component MRO&Us will begin activating in 2025, with timing informed by

² In December 2018, the number of F-35A fighter aircraft to be procured was changed from 42 to 147, of which 42 can be replaced by fighters that are capable of short take-off and vertical landing (STOVL).

³ EODAS; comprising six built-in cutting-edge infrared sensors per aircraft, realizes 360-degree spherical situational awareness, and enables missile detection and tracking.

⁴ In December 2019, for F-35A fighter aircraft procurement in FY2019 and FY2020, and in December 2020, for F-35A fighter procurement in FY2021, it was decided to choose manufacturing arrangements involving domestic companies as it was confirmed to be more cost effective.

⁵ The regional MRO&U for engines in Japan is scheduled to be located at IHI Corporation (Mizuho factory in Tokyo)

regional demands for repair.⁶

Mitsubishi Heavy Industries' Komaki South Plant, located in Aichi Prefecture, began operating as the regional MRO&U for the F-35 fighter airframe in July 2020. Establishing a maintenance depot for airframes, engines and others within Japan, and contributing to maintenance in the Asia-Pacific region are significant from the perspectives of securing the operational support system for F-35A fighter aircraft in Japan, maintaining the Japanese defense industrial base, strengthening the Japan-U.S. Alliance, and deepening equipment cooperation in the Indo-Pacific region.

(2) Initiatives towards the Establishment of the Common Maintenance Base for Ospreys of Japan and the U.S.

As the Planned Maintenance Interval (PMI) of the U.S. Marine Corps Ospreys deployed at Marine Corps Air Station Futenma was scheduled to commence roughly in 2017, the U.S. Navy carried out a public tender to select a maintenance company. Fuji Heavy Industries Ltd.⁷ was selected as the maintenance company for this purpose in

October 2015. From February 2017, the PMI has been performed at GSDF Camp Kisarazu. Maintenance of the first aircraft was completed in March 2019, the second in March 2020, and the third in January 2021, and the aircraft were delivered to the U.S. Forces. The fourth and fifth aircraft are currently under maintenance.

The MOD intends to establish a common maintenance base for both Japan's and the United States' Osprey by allowing the maintenance company to use the hangar at GSDF Camp Kisarazu for aircraft maintenance of the U.S. Marine Corps Osprey and also to implement the future aircraft maintenance of the GSDF Osprey at the same camp from the following perspectives: (1) smooth introduction of the GSDF Osprey (V-22);⁸ (2) smooth and effective operation of the Japan-U.S. security arrangements; and (3) enhanced efficiency in maintenance. The establishment of a common maintenance base at GSDF Camp Kisarazu would be extremely significant in that it will contribute to mitigating the burden on Okinawa as well as the "Strengthening of the basis to repair and maintain common equipment" stated in the new Guidelines.

3 Building New Defense Equipment and Technology Cooperation

1 Defense Equipment and Technology Cooperation with Major European Countries, etc.

Defense equipment and technology cooperation with major European countries, which have competitive defense industries, will contribute to the strengthening of security and defense cooperation with these countries as well as the maintenance and strengthening of the defense industrial base in Japan. Therefore, Japan seeks to establish and deepen relationships with these countries.

(1) The United Kingdom

In July 2013, Japan and the U.K. signed the Agreement concerning the Transfer of Defense Equipment and Technology⁹ and it went into effect. In the same month, the two countries also started the Chemical and Biological Protection Technology Cooperative Research Project, which is the first time for Japan to engage in such bilateral research except for ones with the United States. The Cooperative Research was completed successfully in July 2017.

Also, the Japan-U.K. Cooperative Research Project on the Feasibility of a Joint New Air-to-Air Missile (from November 2014 to March 2018), the Cooperative Research on Personnel Vulnerability Evaluation (from July 2016 to July 2020) and the Cooperative Research on the Certification Process of Jet Engines (from February 2018 to February 2020) were all completed successfully. The Cooperative Research on the Feasibility of a Japan and Great Britain Universal Advanced RF System (JAGUAR) and the Japan-U.K. Cooperative Research Project on the Demonstration of a Joint New Air-to-air Missile were launched respectively in March and December 2018, and are currently in progress.

Furthermore, the two countries have been exchanging information regarding the F-X fighter and the Future Combat Air System (FCAS),¹⁰ which are under study by the two countries respectively, such as the Joint Preliminary Study on Potential Collaborative Opportunities for FCAS/Future Fighter. They involve exchanging views on the potential for future collaboration about these topics between not only the governments but also industries.

⁶ The regional MRO&U for avionics components in Japan is planned to be developed by Mitsubishi Electric Corporation (Kamakura Works in Kanagawa Prefecture)

⁷ The company was renamed SUBARU Corporation on April 1, 2017.

⁸ GSDF will introduce 17 tilt-rotor aircraft (Osprey (V-22)) that can complement and strengthen the capabilities of transport helicopters (CH-47JA) in terms of cruising speed and range. As a temporary measure until completion of the maintenance facilities in Saga Airport, the aircraft will be temporarily deployed at Camp Kisarazu.

⁹ Official name: Agreement Between the Government of Japan and the Government of the United Kingdom of Great Britain and Northern Ireland Concerning the Transfer of Arms and Military Technologies Necessary to Implement Joint Research, Development and Production of Defence Equipment and Other Related Items

¹⁰ Generic name of the whole future fighter aircraft system in the United Kingdom

Additionally, since both countries first held the meeting of the Japan-U.K. High-Level Defence Equipment and Technology Cooperation Steering Panel in July 2014, they have regularly held it.

 See Part III, Chapter 3, Section 1-2-5 (1) (The United Kingdom), p. 366

(2) France

Japan and France established committees on cooperation in the field of defense equipment and on export control respectively in January 2014, and the Agreement concerning the Transfer of Defense Equipment and Technology¹¹ went into effect in December 2016. Moreover, at the Fourth Japan- France Foreign and Defense Ministers' Meeting (“2+2”) held in January 2018, the two countries confirmed their intention to quickly start the cooperative research on the Feasibility Study for Mine Countermeasure Technological Activities and started the cooperative research in the following June.

In addition, in June 2017, the Maritime Self-Defense Force (MSDF) P-1 maritime patrol aircraft participated in the “Paris Air Show 2017,” and ATLA set up an exhibition booth for P-1 aircraft for the first time at an international defense equipment exhibition. The MSDF P-1 maritime patrol aircraft and the ASDF C-2 transport aircraft participated in the “Paris Air Show 2019” held in June 2019.

 See Part III, Chapter 3, Section 1-2-5 (2) (France), p. 368


(3) Germany

Japan and Germany signed the Agreement concerning the Transfer of Defense Equipment and Technology¹² and it went into effect in July 2017. Also, in April 2018, the MSDF P-1 maritime patrol aircraft participated in the “Berlin Air Show 2018,” and the ATLA set up an exhibition booth related to P-1 aircraft.

 See Part III, Chapter 3, Section 1-2-5 (3) (Germany), p. 369

(4) Italy

The Agreement concerning the Transfer of Defense Equipment and Technology¹³ went into effect in April 2019. In January 2019, the two countries held the “Japan-Italy Defense Industry Forum” in Europe for the first time, and established a framework for director-level meetings on defense equipment and technology cooperation.

 See Part III, Chapter 3, Section 1-2-5 (7) (Other European Countries), p. 372

2 Defense Equipment and Technology Cooperation, etc., with Partner Countries in the Indo-Pacific Region

As partner countries in the Indo-Pacific region have expressed their interest and expectation regarding defense equipment and technology cooperation with Japan, the MOD proactively seeks to build relationships with these countries.

(1) Australia

With Australia, the Agreement concerning the Transfer of Defence Equipment and Technology¹⁴ went into effect in December 2014.

Meanwhile, at the Japan-Australia Defence Ministerial Meeting held in October 2014, it was agreed to seek multifaceted cooperation, including the following: (1) exploration of potential cooperation opportunities in the F-35 fighter aircraft program; (2) acquisition reform dialogue with the Defence Material Organisation of Australia; (3) at the request of the Australian side, exploration of the possibility of Japanese cooperation in the Australian Future Submarine Program; (4) defense technology exchanges with the Defence Science and Technology Organization of Australia; and (5) talks between defense industries in both countries. Subsequently, joint research on Marine Hydrodynamics started in December 2015 and ended in November 2019. In November of the same year, the Arrangement concerning the Placement of Scientist and Engineer Personnel was signed, creating the framework for the cooperation of scientists and engineers.

Japan demonstrated its technical strength through the participation of the ASDF C-2 transport aircraft in “Avalon International Airshow” held in Australia in February 2019.

Also, they held the second meeting of the Japan-Australia Steering Committee for Defence Equipment and Technology Cooperation in June 2019. At the meeting, the participants deepened discussions on measures for further promotion of defense equipment and technology cooperation between the countries in an effort to move ahead with the cooperation.

 See Part III, Chapter 3, Section 1-2-1 (Australia), p. 352

(2) India

Japan has considered defense equipment and technology cooperation with India an important field of cooperation based on the special strategic global partnership between

11 Official name: Agreement between the Government of Japan and the Government of France concerning the Transfer of Defense Equipment and Technology

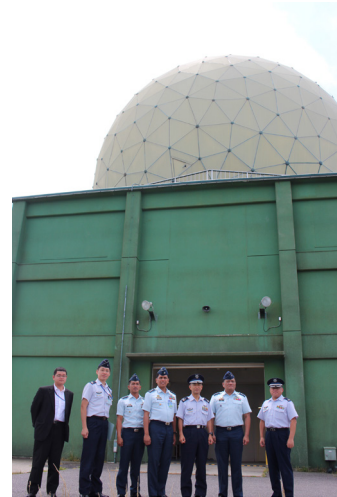
12 Official name: Agreement between the Government of Japan and the Government of the Federal Republic of Germany concerning the Transfer of Defense Equipment and Technology

13 Official name: Agreement between the Government of Japan and the Government of the Italian Republic concerning the Transfer of Defense Equipment and Technology

14 Official name: Agreement between the Government of Japan and the Government of Australia concerning the Transfer of Defense Equipment and Technology



MOD personnel participating in the India Webinar concerning Defense Equipment Transfer (December 2020)



Observation tour of SDF radars by the Philippine Air Force

Japan and India. At the Japan-India summit meeting in December 2015, both countries signed the Agreement concerning the Transfer of Defence Equipment and Technology¹⁵ and it went into effect in March 2016.

To form the case of defense equipment and technology cooperation including dual use technologies, both countries have held the Joint Working Group on Defence Equipment and Technology Cooperation five times so far. At the Japan-India Defence Ministerial Meeting held in September 2017, the ministers agreed to commence the discussions for research collaboration. In July 2018, the two countries launched the Cooperative Research on the Visual SLAM based GNSS Augmentation Technology for UGV¹⁶/Robotics.


Progress has been made in discussions on defense equipment and technology cooperation between the two countries, including the second Japan-India Defence Industry Forum, which was held in Bengaluru in February 2019. Additionally, in order to improve public and private overseas transfer to India, the MOD held the first India Webinar on the overseas transfer of defense equipment in Japan in December 2020 as an opportunity to learn precedents in the private business sector and the current status of defense equipment and technology cooperation with India.


 Part III, Chapter 3, Section 1-2-2 (India), p. 355

(3) Association of Southeast Asian Nations (ASEAN) Countries

Japan and ASEAN member states have exchanged views regarding defense equipment and technology cooperation in non-traditional security sectors, such as humanitarian assistance, disaster relief, and maritime security, through the Japan-ASEAN Defense Vice-Ministerial Meetings and other occasions. Participating countries have expressed their expectation for Japan’s cooperation in effectively dealing with these issues. In the “Vientiane Vision” announced by Japan at the ASEAN-Japan Defence Ministers’ Informal Meeting held in November 2016, it is stated that Japan’s defense equipment and technology cooperation with ASEAN countries would be promoted with a focus on the following three points: (1) equipment and technology transfer, (2) human resources development, and (3) holding seminars on defense industries.

As a specific initiative, Japan and the Philippines made an official agreement on the transfer of MSDF’s TC- 90 training aircraft to the Philippine Navy at the Japan-Philippines summit meeting in September 2016. Based on the agreement, two TC-90s were delivered to the Philippine Navy in March 2017, followed by the delivery of the remaining three TC-90s in March 2018. Furthermore, TC-90 pilot training was conducted for pilots from the Philippine Navy at the MSDF Tokushima Air Base from November 2016 to March 2018. Since April 2017, maintenance and repair assistance by dispatched





Video: Defense equipment cooperation with the Philippines involving TC-90s [Digest version]
URL: <https://www.youtube.com/watch?v=iZzay2CrBJc>

¹⁵ Official name: Agreement between the Government of Japan and the Government of the Republic of India concerning the Transfer of Defense Equipment and Technology
¹⁶ “UGV” stands for “Unmanned Ground Vehicle.”

VOICE

The First Case to Transfer a Set of Complete Japanese Defense Equipment Systems, Air Surveillance Radar Systems, to the Philippines

GOTO Masahito, Lt. General, Director-General of Aerial Systems, Acquisition, Technology & Logistics Agency

Following the establishment of the Three Principles on Transfer of Defense Equipment and Technology in 2014, the Acquisition, Technology & Logistics Agency was formed in 2015. In August 2020, a contract was awarded to deliver four air surveillance radar systems to the Philippines, which marks the first time for a set of complete Japanese defense equipment systems to be transferred overseas. The radar systems will be redesigned and manufactured based on ASDF J/FPS-3 and GSDF JTPS-P14 to satisfy the requirements of the Philippine Air Force. Japan and the Philippines have long cooperated across a variety of levels, from cabinet level diplomacy to staff talks, joint exercises, and defensive cooperation and exchange such as capability building assistance between the SDF and the Armed Forces of the Philippines. In the field of defense equipment, Japan has previously transferred the MSDF TC-90 aircraft and GSDF UH-1H parts to the Philippines. The transfer of a complete set of newly-made air defense radar systems is expected to further deepen the bilateral relationship between Japan and the Philippines beyond the area of national security. Furthermore, I sincerely hope that the transfer will contribute not only to the enhancement of air defense capabilities for the Philippines but also to the nation's regional security.

Looking back on the lessons learned through this endeavor, I would stress the importance of people, including those from embassies, in particular defense attachés and officers of each country, and industrial enterprises. By paying sincere attention to our partner's needs, and engaging with enthusiasm to

KATO Atsushi, Global Defense Systems Marketing Dept., Mitsubishi Electric Corporation

I was responsible for the proposal activities of the Air Surveillance Radar project as a Sales Manager. This radar project will enhance the Air Force's aircraft control and warning capabilities, and its ability to determine the position and speed of airborne subjects. Based on the requirements of the Philippine Air Force and leveraging on our experience in manufacturing various radars for the Japan Self-Defense Forces, we will manufacture an improved and modernized version of our radar for the overseas market. The radars will serve as an essential asset for enhancing the air defense capabilities of the Philippines and ensure regional peace and stability.

For a Japanese company with no previous experience in the international defense market, we faced tough competition against well-established foreign manufacturers. Our sales and engineering teams worked tirelessly to understand and fulfill the specific requirements of the Philippine Air Force and ultimately gained their confidence and approval.

When we started, we were unfamiliar with the Philippines' procurement system and process, and had to conduct extensive research. It was a long journey with many obstacles, but with diligence, perseverance and timely responses to the customer, we finally succeeded in securing Japan's first new

make compelling propositions, I established trust with key stakeholders of the Department of National Defense of the Philippines and the Philippine Air Force, while my staff and corporate representatives fostered relationships at the working level. This truly is an example of, "If you want to sell the goods, sell the personality first." The relationship between the ASDF Chief of Staff and the Chief of the Philippine Air Force at the time also played a critical role in our success.

That is "KIZUNA (bonds)!"

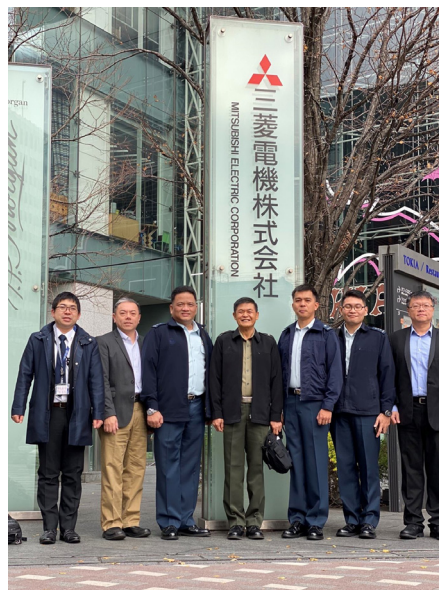
The award of the contract marks only the beginning of a long journey, whereby the true meaning of a successful transfer is defined by the radar's seamless delivery, onsite construction, and its continuous sustainment and operation. We will continue our endeavors as One Team and follow it up with the second, and then the third success!



The author (right) being greeted by the honor guard of the Philippine Air Force

and complete defense equipment contract to an overseas end-user.

I sincerely hope this radar project will contribute to developing closer relations between the Philippines and Japan and contribute to maintaining safer skies in our region.



The author (left) and project members from the Philippines military visiting Japan (December 2019)

LAGUARDIA Gleen Albert C., Colonel, Defense and Armed Forces Attaché, Philippines Embassy

The successful negotiation for the Philippine Air Force's (PAF) Horizon 2 Air Surveillance Radar System (ASRS) acquisition project with Mitsubishi Electric Company (MELCO) marks a historic milestone in Philippine-Japan defense relations. This project is a first for both countries. For the Philippines, it is the first procurement of defense equipment from Japan, while it is Japan's first export of military hardware to a foreign government. The ASRS is projected to bolster the AFP's maritime domain awareness (MDA) and air defense capabilities essential for the Philippines' defense posture.

The ASRS project notably builds upon the momentum of defense engagement between the two countries in several other areas, which was made possible by the 2015 Memorandum on Defense Cooperation and Exchanges between the Philippines' Department of National Defense (DND) and Japan's Ministry of Defense (MOD). Along with other successful transfer of defense equipment made by Japan, the ASRS will undoubtedly boost the situational awareness of the country. This equipment and their utility symbolize the strong

bilateral partnership between the Philippines and Japan, which will be sustained for the mutual benefit of both countries.

As the Philippine Defense and Armed Forces representative in Japan, it was a gratifying moment to finally witness the completion of this project and inform the Filipino people that every peso spent on this equipment is well worth it.



The author receiving an explanation at the ASDF base (January 2021)

personnel from a Japanese maintenance company has been provided.

Regarding the transfer, it was confirmed at the Japan-Philippines Defence Ministerial Meeting in June 2018 that parts and maintenance equipment of the UH-1H utility helicopters that became unnecessary for the GSDF would also be granted to the Philippine Air Force. After the signing of an arrangement between the defense officials involved in the transfer in November 2018, delivery of some components started in March 2019 and was completed in September 2019. These two transfers were cases of the application of the provision of the SDF Act enforced in June 2017 that enables the MOD to grant or transfer the equipment which is decommissioned by the SDF to the governments of developing states for a lower price than the current price (See Paragraph 3 below).

Further, in January 2019, a framework was established for regular consultations of the Joint Working Group on Defense Equipment and Technology Cooperation. In August 2020, a contract was concluded between the Department of National Defense of the Philippines and Mitsubishi Electric Corporation, Inc., who would supply four air surveillance radar systems for approximately US\$100 million. This was the first case of overseas transfer of finished equipment since the 2014 establishment of the Three Principles on Transfer of Defense Equipment and Technology.

In November 2017, Japan and Thailand agreed to promote

future defense equipment and technology cooperation, including early conclusion of the Agreement concerning the Transfer of Defense Equipment and Technology.

Japan and Vietnam signed the Terms of Reference (TOR) for regular consultations concerning defense equipment and technological cooperation at the Japan-Vietnam Defense Vice-Ministerial Level Meeting in November 2016. Concerning the specific fields of cooperation, the Memorandum on the Orientation of Promotion of Defense Industry Cooperation was signed during the Japan-Vietnam Defense Ministers' Meeting in May 2019. In addition, at the Japan-Vietnam summit meeting held in October 2020, the leaders reached consensus in principle on the Agreement concerning the Transfer of Defense Equipment and Technology.

Additionally, the MOD held the Vietnam webinar on the overseas transfer of defense equipment in March 2021 and learned precedents in the private business sector and the current status of defense equipment and technology cooperation with Vietnam to improve public and private knowledge on the overseas transfer of defense equipment to Vietnam.


Japan and Malaysia signed the Agreement concerning the Transfer of Defence Equipment and Technology¹⁷ and it went into effect in April 2018.

Japan and Indonesia held the Second Japan-Indonesia "2+2" in Tokyo in March 2021. On the spot, both countries signed the Agreement concerning the Transfer

¹⁷ Official name: Agreement between the Government of Japan and the Government of Malaysia concerning the Transfer of Defence Equipment and Technology

of Defense Equipment and Technology.¹⁸

The MOD will continue to promote cooperation for humanitarian assistance and disaster relief as well as the maritime security area through these initiatives.

 See Part III, Chapter 3, Section 1-2-3 (Association of South-East Asian Nations [ASEAN]), p. 358

(4) Middle East

With regard to the United Arab Emirates (UAE), in November 2019, Japan participated in the “Dubai Air Show 2019” in the UAE and held the static display and the flight demonstration of the C-2 transport aircraft. His Highness Prince Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, and other high-level government officials viewed them there.

With regard to Jordan, upon a request from His Majesty King Abdullah II ibn Al Hussein, King of the Hashemite Kingdom of Jordan, in August 2019, Japan lent a retired GSDF Type-61 main battle tank without charge to Jordan for display at the Royal Tank Museum. Meanwhile, the King offered to donate an armored vehicle developed in Jordan to the Japanese GSDF and the GSDF received the vehicle in the same month. In October 2019, both countries held a ceremony for the lending and donation at the MOD. At the ceremony our Minister of Defense and Jordanian ambassador extraordinary and plenipotentiary to Japan delivered speeches, and signed and exchanged letters. In November 2019, our ambassador extraordinary and plenipotentiary to Jordan and the Director of the Jordan Royal Tank Museum unveiled the loaned GSDF Type-61 main battle tank at the museum and set up a panel for its explanation.

Israel and Japan signed a Memorandum on Protection of Information for the Exchange of Classified Information on Defense Equipment and Technology¹⁹ in September 2019 for appropriate protection of such classified information provided between Japanese and Israeli defense authorities.

3 Establishment of Regulations on Equipment Cooperation with Developing Countries

Surrounded by an increasingly severe security environment, it has become even more important for Japan that the nations which have a cooperative and friendly relationship with Japan in terms of security and defense have appropriate capabilities. It is also critical to develop a foundation that will serve as the basis for the international community to cooperate towards improving the security environment.

Among these friendly nations, some have difficulties in acquiring an adequate level of defense equipment on their own because of their economic and fiscal situations. Some of these states are requesting to use SDF’s equipment which is no longer used. However, Article 9, paragraph (1) of the Public Finance Act²⁰ stipulates that the Government must receive reasonable consideration when transferring or leasing any governmental properties including the SDF’s equipment to other countries. Therefore, a grant or a transfer at a lower price than the current price is not allowed except when permitted by law.

Under these circumstances, to respond to the needs of such friendly nations, the MOD established a special provision of Article 9, paragraph (1) of the Public Finance Act in the SDF Act and it went into force in June 2017. The provision enables the MOD to grant or transfer the SDF’s equipment which is no longer used to the governments of developing states at a lower price than the current price.

Even in the case of granting or transferring equipment at a lower price than the current price as per this provision, whether or not to transfer such equipment, and to which government such equipment is to be transferred, will be determined case-by-case in light of the Three Principles on Transfer of Defense Equipment and Technology and other regulations. In addition, the Government of Japan and partner countries must conclude an international agreement to prevent extra-purpose use and transfer to third-parties without the prior consent of Japan.²¹

4 Adapting Defense Equipment for External Use

With regard to aircraft, since there is much in the technological base shared between the defense and civilian sectors, taking measures to contribute to the revitalization

of the civilian sector will contribute to maintaining and activating the industrial bases of Japanese aircraft, and by extension, to maintaining and strengthening the defense

¹⁸ Official Name: Agreement between the Government of Japan and the Government of the Republic of Indonesia concerning the Transfer of Defense Equipment and Technology

¹⁹ Official name: Memorandum on Protection of Information for the Exchange of Classified Information on Defense Equipment and Technologies between the Ministry of Defense of Japan and the Ministry of Defense of the State of Israel

²⁰ Article 9, paragraph (1) of the Public Finance Act (Act No.34 of 1947) states governmental assets, unless otherwise provided, may not be exchanged and used as other means of payment, or transferred or leased without reasonable consideration.

²¹ As of April 2021, Japan has signed the Agreement concerning the Transfer of Defense Equipment and Technology with the following countries: the United States; the United Kingdom; Australia; India; the Philippines; France; Italy; Germany; Indonesia; and Malaysia. Additionally, Japan has reached consensus in principle on the Agreement concerning the Transfer of Defense Equipment and Technology with Vietnam. (See Reference 29 [Situations Concerning the Conclusion of Agreements])

industrial base in Japan. It is from this perspective that the MOD has been considering the civilian use of aircraft that it has developed.

In August 2010, the MOD compiled a set of guidelines for the development of a concrete system for the civilian use of aircraft, while in 2011, it also developed an application procedure for private companies interested in civilian use. So far, technical data related to the civilian use of the US-2 amphibian rescue aircraft and the F7-10 engine that are mounted on P-1 maritime patrol aircraft have been disclosed in response to requests from the implementing companies. In December 2016, the ATLA and IHI Corporation, a company manufacturing the F7-10 engine, signed a contract for the civilian use of the F7-10 engine for sales to the Japan Aerospace Exploration

Agency (JAXA) for the first time. The engine was delivered to JAXA in September 2019.

Considering that there have been inquiries about equipment other than aircraft not only from the private sector but also from foreign governments since the establishment of the Three Principles for the Transfer of Defense Equipment and Technology, the term was changed from “Adapting Defense Equipment for Civilian Use” to “Adapting Defense Equipment for External Use,” and procedure rules were prepared in August 2018 towards project formulation in the future. In 2019, technical data, etc., for adapting defense equipment for external use concerning the automatic flight control computer processing unit for the improved SH-60K and Ship Landing Assist System for SH-60K were disclosed upon applications from companies.

5 Participation in International Defense Equipment Exhibitions

From the viewpoint of promoting defense equipment and technology cooperation, ATLA has participated in international defense equipment exhibitions to introduce Japan’s defense equipment policies and advanced technology. These initiatives help foreign government officials better understand Japan’s equipment policies and technology, and contribute to building bases for the promotion of defense equipment

and technology cooperation.

In 2019, Japan participated in “Dubai Air Show 2019” in the UAE and held the static display and flight demonstration of the C-2 transport aircraft, which Japan has developed. Also, Japan held, “Defence and Security Equipment International Exhibition and Conference: DSEI Japan 2019” in Makuhari Messe in 2019, and ATLA ran an exhibition booth there.

6 Public-Private Collaboration for Appropriate Overseas Transfer of Defense Equipment

With regard to the overseas transfer of defense equipment, the National Defense Program Guidelines and Medium Term Defense Program stipulate “Whole-of-government efforts to promote appropriate overseas transfer of defense equipment under the Three Principles on Transfer of Defense Equipment and Technology.” In response to this, the MOD has worked together with the public and private sectors in order to strengthen the defense industrial base while promoting security cooperation with other countries. Specifically, in cooperation with trading companies and manufacturing companies, the MOD has conducted Feasibility Studies to grasp the potential needs of target countries and carry out activities for proposals since FY2020.

Moreover, the MOD co-hosts the Defense Industry Business Forum with other countries, providing the opportunity for both countries’ defense authorities and companies to meet together and exchange views on the overseas transfer of defense equipment. The MOD has conducted the Defense Industries Business Forum with six countries so far: Indonesia (held in August 2017), Vietnam, Australia, Italy and the Philippines.

Additionally, based on the request from the defense industry, the MOD is currently establishing a portal site designed to provide a platform to share information on the overseas transfer of defense equipment. The portal site is scheduled to commence operation in FY2021, and new information will be posted as necessary.

7 Preventing Leakage of Key Technologies for Defense Equipment

In promoting defense equipment and technology cooperation internationally, the MOD will work to strengthen (1) intellectual property management, (2) technology control, and (3) information security in order to prevent

leakage of key technologies for defense equipment.

 See Section 4-3-2 (4) b (Preventing Leakage of Key Technologies), p. 455

1 Military Intelligence Collection

For formulating defense policy accurately in response to the changes in the situation and for operating defense capabilities effectively in dealing with various situations, it is necessary to grasp medium- to long-term military trends in the neighboring countries of Japan and to detect the indications of various situations promptly. To this end, the Ministry of Defense (MOD)/Self-Defense Forces (SDF) always makes efforts to collect information swiftly and accurately by using various methods.

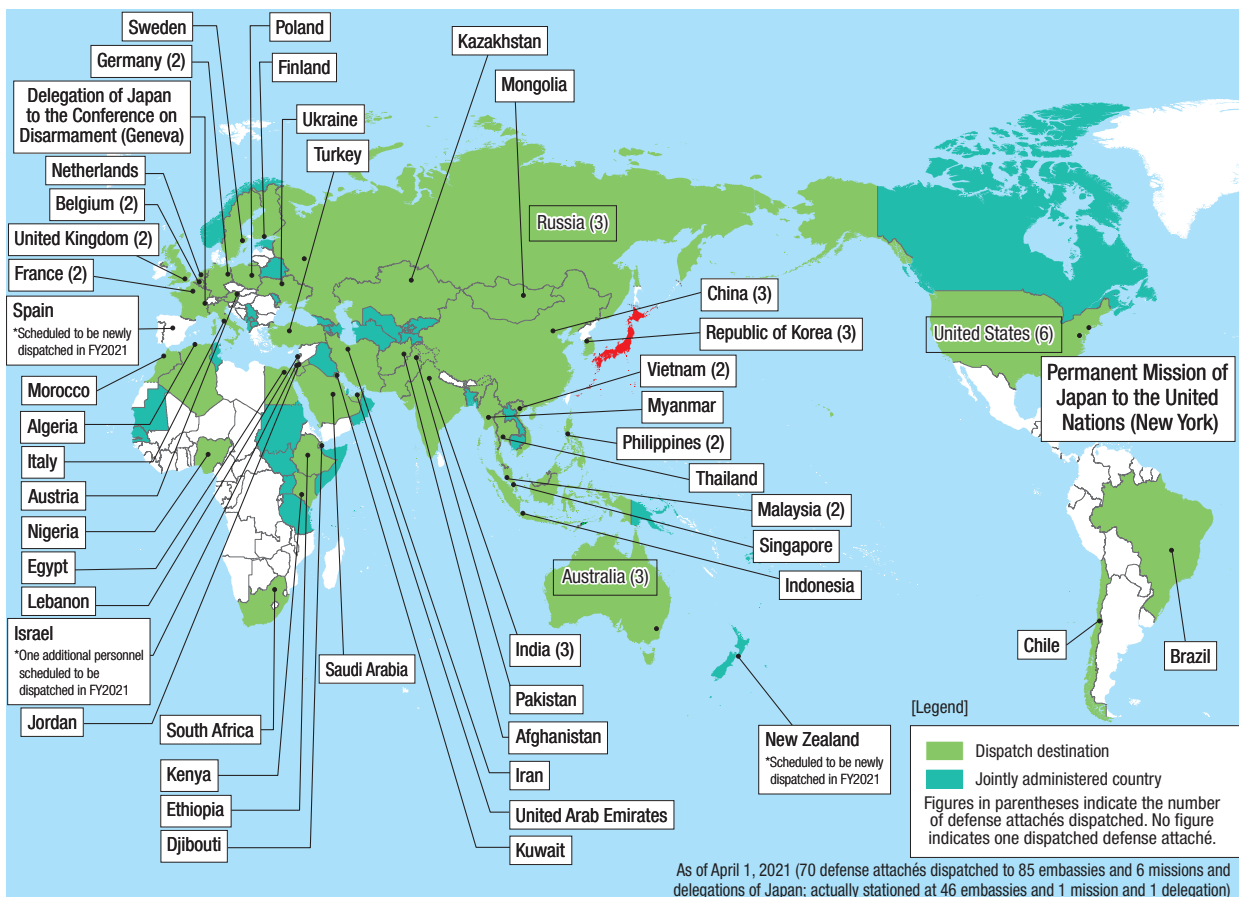
Examples of intelligence collection means used by the MOD/SDF include: (1) collecting, processing and analyzing military communication signals and signals emanating from electronic weapons in the air over Japan; (2) collecting, processing, and analyzing data from various imagery satellites (including Information Gathering

Satellite (IGS));¹ (3) surveillance activities by ships, aircraft and other assets; (4) collecting and organizing a variety of open source information; (5) information exchanges with defense organizations of other nations; and (6) intelligence collection conducted by defense attachés and other officials.

As for defense attachés, in FY2020, the defense attachés assigned to Kenya and Australia took additional responsibility for the Seychelles and Tonga, respectively. The MOD is also planning to newly dispatch one defense attaché to New Zealand and Spain respectively, and dispatch one additional attaché to Israel, in FY2021, to reinforce cooperation with the Oceania region and improve intelligence collection related to Europe and the Middle East.

 See Fig. IV-3-1 (Dispatched Defense Attachés [image])

Fig. IV-3-1 Dispatched Defense Attachés (image)



¹ Information Gathering Satellite (IGS) of the Japanese Government is operated by the Cabinet Satellite Intelligence Center. The MOD, along with other ministries and agencies, utilizes the imagery intelligence provided by the IGS.

Colonel HIDESHIMA Takaaki, Defense Attaché, Lebanon

Lebanon is a small, beautiful country on the east coast of the Mediterranean in the western Levant region. It has long been a wonderful melting pot of people, ethnicities and cultures from countries across the Middle East, Europe, North and South America, and other countries. In recent years, unfortunately, Lebanon has faced political



The author (right) visiting the Lebanese Army

and economic crises, the fallout and flood of refugees from the civil war in neighboring Syria, the explosion in Beirut harbor, and the COVID-19 virus, and thus finds itself in national crisis.

I will work with the local people of Lebanon, and cooperate with the officers of related nations, the Lebanese Army and UN organizations to build the foundation for future diplomacy, while carefully ascertaining and analyzing the complex military situation in Lebanon as it is affected by the U.S., Russia and other major powers in the region.

Captain KURIHARA Yasushi, Defense Attaché, Singapore

As a Defense Attaché, I conduct coordination with both the Singapore government and military. Seeing the national defense efforts of this small city-state with an area about the size of Tokyo's 23 wards,



At a reception with military officers from various countries (author: center)

I can feel firsthand the strong will of the nation to protect its national independence and security, and it makes me think about how we should protect our own country.

Singapore, which is located in the center of the Indo-Pacific region, is an extremely important country for the SDF, which is increasing its activities in the region. I am determined to firmly fulfill my role as a Defense Attaché working in this country.

Colonel HIRAMITSU Yasunori, Defense Attaché, Israel

After the alarm sounded, I looked up at the sky and saw two contrails. This is the moment when I realized how important it is to



Online Politico-Military Dialogue (PM) (author: right end) [The Ministry of Defense of the State of Israel]

have a reliable missile defense capability, as I saw civilians calmly continuing with their lives as the missile defense system intercepted the rockets. As an innovative country, Israel's technological prowess is attracting attention from the business world, and its presence in the defense field is growing worldwide. As Israel's normalization of relations with various Arab countries progresses, I will continue to conduct intelligence collection on a daily basis and exert all efforts as a Defense Attaché to further deepen relations with Israel, which is enthusiastic about defense cooperation with Japan.

Lieutenant Colonel SAITO Satoshi, Defense Attaché, Chile

I was appointed as Japan's first Defense Attaché in Chile, a South American country located in the easternmost part of the Pacific Ocean. Chile is a key country in terms of security



The author paying a courtesy call to Army General Ricardo Martínez Menanteau, Commander-in-Chief of the Chilean Army (author: right)

in South America, and most of the countries in the region have dispatched military officers to the country. In Chile, civilian control of the military is esteemed. The country has many similarities with Japan, such as being an earthquake-prone country. It is a strategic partner with which we share fundamental values. It supports the "Free and Open Indo-Pacific," strategy and has indicated high interest in exchanges with Japan's SDF. Despite the geographical distance from Japan, as Japan's Defense Attaché in Chile, I will exert all efforts to build relations that can overcome this great distance and further develop bilateral relations.

2 Initiatives towards Enhancing Intelligence Capabilities

Under the National Defense Program Guidelines for FY2019 and beyond (NDPG), in order to provide timely and effective intelligence support to policy decision and SDF operations, the MOD/SDF will promote initiatives to comprehensively enhance intelligence capabilities at all stages of intelligence, including gathering, analyzing, sharing and securing of information.

Specifically, the MOD/SDF is strengthening information gathering and analysis capabilities so that the MOD/SDF will be fully capable of meeting various intelligence requirements including those related to new domains. This is being conducted by strengthening gathering postures for SIGINT and IMINT through establishing and enhancing capabilities of information collection facilities, utilizing IGS and commercial satellites, and diversifying means for information collection through new equipment such as long-endurance Unmanned Aircraft Vehicles (UAVs). Furthermore, the MOD/SDF is also strengthening the gathering posture of HUMINT through enhancing its defense attaché system, reinforcing the gathering posture of OSINT and expanding its cooperation with allied countries.

In this regard, the MOD/SDF proactively utilizes the latest information processing technology, promotes all-source analysis by fusing a wide variety of information

sources together, and successfully develops and connects systems that promote information sharing. In order to respond appropriately to increasingly diversified intelligence requirements, the MOD/SDF is promoting the securing and training of highly capable personnel handling information collection and analysis. Moreover, the MOD/SDF is taking steady measures in various directions including recruitment, education, training, and personnel allocation to strengthen comprehensive information collection and analysis capabilities.

With regard to information security, the MOD/SDF will coordinate with relevant offices to make every effort by such means as education in ensuring information sharing on a need-to-know basis, and in taking preventive measures against information leakage. Also, the MOD/SDF will strengthen counter-intelligence capability within the MOD/SDF by promoting collaboration with relevant organizations.

In addition, the Senior Coordinator for Intelligence on Economic Security was established in the Defense Intelligence Division, Bureau of Defense Policy in FY2021 to establish the institutional framework to assume responsibility for both “gathering and analyzing” and “securing” all kinds of information concerning economic security including advanced technologies.

3 Defense Intelligence Headquarters

1 Mission of the Defense Intelligence Headquarters

The Defense Intelligence Headquarters is the central intelligence agency of the MOD and the largest intelligence agency of Japan. It was established in 1997 in order to develop a framework for sophisticated and comprehensive information gathering and analysis in the increasingly complicated security environment following the Cold War. The Headquarters gathers SIGINT, IMINT, GEOINT, OSINT, etc., and analyzes international and military situations, and other matters related to Japan’s swiftly changing security environment.

2 Activities of the Defense Intelligence Headquarters

The Defense Intelligence Headquarters is an organization consisting of Ground Self-Defense Force (GSDF), Maritime Self-Defense Force (MSDF) and Air Self-Defense Force (ASDF) personnel, and administrative and technical officials (specialized in language, technology, administration or general office). SDF personnel use the knowledge based on their experience in their unit, whereas administrative/technical officials use their expert knowledge in language, technology, and other fields. They are working together for their mission.

Specifically, they conduct comprehensive analysis on international situations that change day by day from diverse perspectives, including military, political and economic factors, based on information received from a wide range of sources including SIGINT, IMINT, OSINT (newspapers, internet, etc.) and opinion exchange with relevant parties.

The Defense Intelligence Headquarters is also strengthening information gathering and analyzing functions in new areas such as space, cyber, and the electromagnetic spectrum. For example, it conducts the collection and analysis of necessary information regarding threats in cyberspace through such means as collecting OSINT and exchanging information with other countries.

Results of the Defense Intelligence Headquarters’ intelligence service are provided as analysis products to the Prime Minister, the Minister of Defense, the National Security Secretariat established within the Cabinet Secretariat, the Cabinet Intelligence and Research Office, as well as GSDF, MSDF and ASDF units in a timely and appropriate manner to support policy decision and unit operation. The Defense Intelligence Headquarters also actively exchanges information with relevant ministries and agencies and foreign counterparts.

Self-Defense Forces Maintaining and Improving High Level of Proficiency through Training and Exercises

Section 1

Training and Exercise by Each Self-Defense Force (SDF)

The National Defense Program Guidelines (NDPG) states that for Japan's defense capability to demonstrate its true value, the SDF needs to constantly maintain and enhance its capabilities from peacetime and that **training and exercise** comprise one of the important elements supporting defense capabilities.

For the SDF to fulfill its mission to defend our nation, it is necessary to assume a robust defense posture not only by enhancing the equipment but also by having highly qualified and capable commanders and other personnel and highly proficient units from peacetime. Assuming a robust defense posture is to fulfill the function of deterring any country that intends to invade Japan from doing so.

In addition, to strengthen the ability of the Japan-U.S. Alliance to deter and counter threats, the NDPG states that Japan will even more actively conduct bilateral/multilateral training and exercises in order to further deepen various operational cooperation and policy coordination with the United States. The SDF is

steadily conducting bilateral/multilateral training in each service and Japan-U.S. bilateral joint exercises (field training exercises and command post exercises) with the corresponding U.S. military branch.

Furthermore, it states that the SDF will enhance its presence from peacetime by actively engaging in bilateral/multilateral training and exercises and overseas port visits, thereby demonstrating Japan's will and capabilities, and that Japan will actively engage in bilateral/multilateral training and exercises from the perspective of strategically promoting multifaceted and multilayered security cooperation in line with the vision of a "Free and Open Indo-Pacific."

To this end, through bilateral/multilateral training and exercises with allies and partners, Japan is striving to stabilize the Indo-Pacific region, which is closely connected to our security, and working to respond to the global security challenges and destabilizing factors to which it is difficult for a country to respond individually.

1 Improving the Proficiency of Troops

Training and exercise conducted by units in each service can be broadly divided into training for individual SDF personnel to improve the necessary proficiency for their respective fields, and training and exercise for units to enhance their systematic capabilities. Training for individuals is conducted one-on-one in stages based on the specialties and abilities of individual personnel. Training and exercise for units is conducted beginning with small units and gradually increasing in size

up to large-scale comprehensive training including coordination with the objective of fully exerting the capabilities of the organization.

Each SDF is striving to develop mentally and physically healthy, highly skilled SDF personnel and to build up highly proficient units under various constraints and while taking the greatest of care in preventing accidents and otherwise securing safety.



Key Words What are training and exercise?

The purpose of maneuver, deployment and field training is to enhance the proficiency of SDF personnel and to build up powerful units. It can be divided into "individual training (training on an individual basis)" and "unit training." "Unit training" in turn can be divided into "training," which progresses step by step from the basics to application, through which the unit becomes experienced in acting as an organization and enhances its proficiency so that it is able to fulfill its mission; and "exercises," where various types of units participate under the premise that the SDF is in action, such as defense operations, and train their joint capabilities.

1 GSDF

The Ground Self-Defense Force (GSDF) conducts training for the operation of its units according to their respective fields including infantry, field artillery, armor, and military engineering as well as joint interdisciplinary training, in which units from different fields cooperate.

In 2020, the Training Evaluation Unit was established in Hokkaido to utilize the favorable training environment there for conducting force-on-force exercises between units based on the regiment level in action.



GSDF's 7th Field Artillery Regiment enhancing night combat capability

2 MSDF

The Maritime Self-Defense Force (MSDF) uses a training system that enhances proficiency in stages, as a specific period that takes account of the timing of crewmember rotations and naval vessel inspections and repairs is determined as the cycle, which is then divided into multiple stages.

In the early stages of training under this system, a transition occurs to applied unit training in accordance with the enhancement of the proficiency with naval vessels and aircraft, which are the basic units of fighting capability, and collaborative training between naval vessels and between naval vessels and aircraft is conducted.



MSDF personnel in training

3 ASDF

In order to develop the capability of its personnel to fully utilize cutting-edge technologies, the Air Self-Defense Force (ASDF) conducts unit-specific training of fighter aircraft, air warning and control, anti-air guided missiles and others, with a focus on enhancing the professional expertise of the individual at the initial stages of the training.

Here, the aim is to enable ASDF personnel and aircraft and other equipment to function together as whole. As proficiency is enhanced, the ASDF conducts training for coordination procedures between units, and further conducts comprehensive training with air transport, rescue, and other units added.



Flight instruction group, F-15 aggressor

4 Joint Training

To fully exert Japan's defense capability during contingencies, it is necessary to gain experience in joint operations of the Ground, Maritime, and Air Self-Defense Forces on a steady-state basis. Because of this, the SDF conducts joint training, in which two or more branches of the SDF cooperate, and is working to augment it.

Joint training can be divided into joint function



Maritime transport, Type 99 155mm self-propelled howitzer

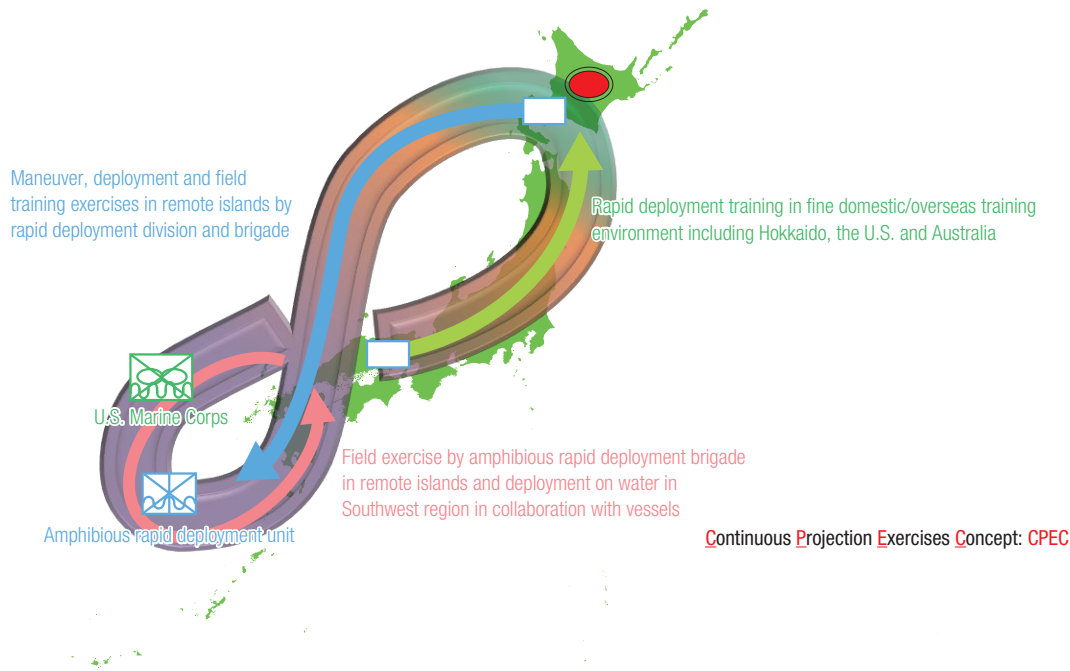
Fig. IV-4-1-1

Continuous Projection Exercises

An example of continuous projection exercises

○ Continuous Projection Exercises Concept (CPEC)

Improve deterrence and response capabilities by deploying highly trained GSDF units to the southwest and other areas to conduct field training exercises



training, joint operation training, and joint exercise. Joint exercise consists of training and exercise based on the overall response concept of the SDF and is planned

and implemented by the Joint Staff and has been conducted since 1979 including bilateral joint exercises with U.S. Forces.

2 Significance of Training and Exercise

Each branch of the SDF is working under the Mid-Term Defense Program (MTDP) to further enhance its amphibious operation capability and various other tactical skills and to enhance the effectiveness of the swift and continuous deployment of units and strengthen their presence from peacetime by organically coordinating the joint training with the training and exercises of the respective branches, while utilizing training environments in Japan and abroad.

In order to effectively respond to various contingencies and enhance its deterrence effectiveness, as the culmination of this training on the operation basis, joint training and exercises of the SDF and Japan-U.S. bilateral training and exercises are conducted in a tailored and visible way with the aim of enhancing joint operation capabilities and Japan-U.S. joint response capabilities. Leveraging the lessons learned from these training and exercises, studies and reviews of the overall response

concept are to be regularly implemented.¹

In conducting such training and exercise, seeking to respond to various situations with a whole-of-government approach, coordination with relevant agencies including the National Police Agency, Fire and Disaster Management Agency, and Japan Coast Guard will be secured and simulation and comprehensive training and exercise will be expanded in cooperation with local governments, private sector organizations, and others.

The SDF will also actively utilize the opportunities presented by the joint training and exercises of the SDF and Japan-U.S. bilateral training and exercises as a way not only for developing and verifying plans for the actual SDF operations, but also for comprehensive issues including civil protection.

 See Fig. IV-4-1-1 (Continuous Projection Exercises)

¹ Training includes, in addition to SDF joint exercises, Japan-U.S. bilateral joint exercises, integrated air and missile defense exercises, and others such as exercises to prevent and repel direct threats to Japan, and exercises as Joint Exercises for Rescue (JXR) for large-scale disaster response and International Peace Cooperation Exercises for international peace cooperation activities.

3 Main Training Activities of Each SDF

1 Main Training Activities of the GSDF

In addition to the GSDF exercises (first conducted in 1982), in which all units in Japan are mobilized, army field training exercises, and maneuver and deployment training exercises, the GSDF is working to enhance its response capabilities for various contingencies and to strengthen the abilities of the Japan-U.S. Alliance to deter and counter threats through training and other joint activities with the United States and other countries such as field training exercises “Orient Shield” (in Japan) with the U.S. Army and field training exercises “Resolute Dragon” (in Japan) and “Iron Fist” (overseas) with the U.S. Marines.

(1) Main Training Activities to Strengthen Capabilities for Effective Deterrence and Response to Various Contingencies









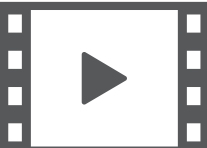



The GSDF is working to enhance response capabilities for various contingencies and other situations through maneuver and deployment training, in which rapid

deployment divisions and brigades are mobilized nationwide, and field training exercises at the army level beginning with the Western Army. It is also working to strengthen amphibious functions while absorbing practical knowhow possessed by the U.S. Forces through “Iron Fist,” field training exercises with the U.S. Marines.

In addition, it conducts parachute drop training from U.S. Air Force aircraft in Japan with the aim of maintaining and improving the tactical skills necessary for airborne operations and maintaining and improving the effectiveness of airborne operations by U.S. aircraft.

Furthermore, it is working to enhance proficiency involving cooperation between various fields by utilizing favorable training infrastructure in Japan and abroad, particularly by conducting force-on-force, field training exercises in Hokkaido in cooperation with the Training Evaluation Unit.

It is also working to strengthen surface-to-air/surface-to-ship combat capabilities by conducting live-fire training for Hawk/Chu-SAM/SSM units and working to enhance firing capabilities by participating in the

		<p>Video: AIRBORNE21 URL: https://twitter.com/jgsdf_1stAbnB/status/1372021173081366532</p>	
		<p>Video: Field Training with U.S. Marines in the United States “Iron Fist 2020” URL: https://www.youtube.com/watch?v=1Z09vuM-Xdo</p>	
		<p>Video: Field Training with U.S. Marines in Japan “Forest Light” URL: https://www.youtube.com/watch?v=U3D4C2CalRw&feature=share</p>	
		<p>Video: Field Training with U.S. Forces in Australia “Talisman Sabre 19” URL: https://fb.watch/567pKdWffd/</p>	
		<p>Video: Bilateral Exercise with the Indian Army “Dharma Guardian 19” URL: https://www.youtube.com/watch?v=zobSfEAnllc</p>	
		<p>Video: U.S.-Philippines Bilateral Exercise FY2020 “KAMANDAG 2019” URL: https://www.youtube.com/watch?v=bal6T2UsDZI</p>	

Australian Army Skill at Arms Meet (AASAM). It is also working to enhance the cooperation capabilities of the respective fields that bring information, mobility, and firepower together through “Rising Thunder,” field training exercises with the U.S. Army, “Exercise Southern Jackaroo,” field training exercises in Australia with the U.S. Army and others.

(2) Main Training Activities to Strengthen Ability of Japan-U.S. Alliance to Deter and Counter Threats

The GSDF is working to enhance the effectiveness of Japan-U.S. joint response as well as cross-domain operation capabilities by conducting the various abovementioned command post exercises and field training exercises year-round with the Japan-U.S. bilateral regional army command post exercise “Yamasakura” as the mainstay.

(3) Main Training Activities to Promote Security Cooperation

The GSDF is contributing to the creation of a security environment favorable to Japan by strengthening cooperation and trust with other countries through bilateral/multilateral exercises such as “Dharma Guardian,” the field training exercises with the Indian Army, and “Khaan Quest,” the Multilateral Exercises hosted by Mongolia, and “ARC 21,” the Multilateral Exercise with the French, U.S. and Australian Navies.

Furthermore, it is working to strengthen cooperation



Senior Vice-Minister and Parliamentary Secretary observing the Japan-U.S. Bilateral Regional Army command post exercise “Yamasakura”

with other allies of the United States through “Vigilant Isles,” the field training exercises with the British Army, and “KAMANDAG,” the field training exercises with the U.S. Marines in the Philippines.

2 Main Training Activities of the MSDF

The MSDF is strengthening the ability of the Japan-U.S. Alliance to deter and counter threats and contributing to upholding and reinforcing a “Free and Open Indo-Pacific” through MSDF field training exercises, conducted since 1955, in which units nationwide are mobilized, and the Multilateral Exercise RIMPAC, hosted by the U.S. Navy since 1980, exercises in the Indo-Pacific Deployment (IPD), conducted since 2018, the Japan-U.S.-India-Australia Multilateral Exercise “Malabar,” conducted since 2007, and others.



(1) Main Training Activities to Strengthen Capabilities for Effective Deterrence and Response to Various Contingencies



The MSDF is working to enhance readiness through simulation training (including Japan-U.S. bilateral exercises) and field training exercises ((including Japan-U.S. bilateral exercises and Japan-U.S.-Australia-Canada quadrilateral exercises).

It is also working to enhance various tactical skills through mine disposal training (Iwo To), mine warfare training (Hyuga-nada Sea, Mutsu Bay, Ise Bay), and



MSDF vessel unit participating in the Japan-U.S. Bilateral Joint Exercise “Keen Sword 21”

  **Video:** Enhancing the effectiveness of the Japan-U.S. joint response, etc.
URL: <https://youtu.be/XU3aulNdvig>

 **Video:** Mine disposal training in FY2020
URL: <https://www.youtube.com/watch?v=qgdHbRNwprY> 

minesweeping special training (Hyuga-nada Sea, Mutsu Bay, Ise Bay).

Furthermore, it is working to enhance various tactical skills utilizing favorable overseas training infrastructure with the cooperation of the U.S. Navy by conducting overseas deployment training in the United States for destroyers and submarines, in waters around Guam for minelayers, and for aircraft in the United States.

(2) Main Training Activities to Strengthen Ability of Japan-U.S. Alliance to Deter and Counter Threats

The MSDF is working to enhance the effectiveness of Japan-U.S. joint response as well as cross-domain operation capabilities through Japan-U.S. bilateral exercises with naval vessels and aircraft, anti-submarine special exercises, minesweeping special training, medical special training, and Japan-U.S. medical joint training.

The MSDF conducts bilateral/multilateral exercises intensively with the U.S. Navy in the East China Sea and Southeast China Sea. For example, in August 2020, Destroyer JS “Suzutsuki” and U.S. Navy Destroyer USS “Mustin” conducted bilateral exercises in the East China Sea; and in October 2020, Destroyers JS “Kaga” and JS “Ikazuchi,” participating in the Indo-Pacific Dispatch Training (IPD) at the time, joined U.S. Navy Destroyer SS “John S. McCain” and Replenishment Oiler SS “Tippecanoe” to conduct bilateral exercises.

(3) Main Training Activities to Promote Security Cooperation

In addition to the Indo-Pacific Deployment Training (IPD), the MSDF is working to create a security environment favorable to Japan by building and strengthening trust with other countries in the Indo-Pacific region by conducting bilateral/multilateral exercises with their navies such as the Japan-U.S.-Australia trilateral exercises, the Japan-Australia bilateral exercises, the Japan-India Maritime Exercises “JIMEX,” the Japan-Sri Lanka Maritime Exercises “JA-LAN EX,” goodwill exercises with the Indonesian Navy, and the Japan-U.S.-Australia-ROK Multilateral Exercises “Pacific Vanguard,” the Japan-Australia-France-US Multilateral Exercise “ARC21.”

For example, from September to October 2020, Destroyer JS “Kaga,” Destroyer JS “Ikazuchi,” and others conducted the Indo-Pacific Deployment Training (IPD), conducting multilateral training with the U.S., Australian, Indian, Indonesian, and Sri Lankan navies located in the Indo-Pacific region, and made calls at Cam

Ranh, Vietnam and Colombo, Sri Lanka.

In addition, the Japan-U.S.-India-Australia Multilateral Exercise “MALABAR 2020,” held in November, the gathering of the naval vessels from Japan, the United States, India, and Australia in the Bay of Bengal and the northern Arabian Sea, the main sea areas of the Indo-Pacific, served as a manifestation of the common will of the four countries to uphold and reinforce the vision of a “Free and Open Indo-Pacific” while demonstrating mutual cooperation and unity.

3 Main Training Activities of the ASDF

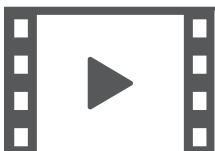
The ASDF is working to strengthen the ability of the Japan-U.S. Alliance to deter and counter threats and to strengthen cooperation with other countries, through training and exercises such as “Red Flag-Alaska,” the U.S. Air Force Exercise conducted since 1996, and the Japan-U.S.-Australia Multilateral Exercise “Cope North,” conducted in Guam since 1999, in addition to the field training exercise Air Defense Command comprehensive training, in which all relevant units in Japan are mobilized, and exercises conducted for each function. On those occasions, it contributes to upholding and reinforcing of a “Free and Open Indo-Pacific” through aircraft flights and visits in the Indo-Pacific region.

(1) Main Training Activities to Strengthen Capabilities for Effective Deterrence and Response to Various Contingencies

The ASDF is working to enhance maneuver and deployment capabilities and responsiveness through PAC-3 maneuver deployment training and overseas flight training. It is also strengthening air defense combat



F-15 fighter aircraft firing missile during training



Video: Video of training to enhance proficiency (skill at arms, etc.)

URL: <https://youtu.be/sIDFzwlTJxw>

operation capabilities through live-fire training for surface-to-air missile units, utilizing favorable training infrastructure abroad.

Furthermore, it is working to enhance the mission potential of airlift units by utilizing the Advanced Airlift Tactics Training Center (AATTC) in the United States.

(2) Main Training Activities to Strengthen Ability of Japan-U.S. Alliance to Deter and Counter Threats

The ASDF is working to enhance the effectiveness of Japan-U.S. joint response as well as cross-domain operation capabilities through air combat training, intercept training, defensive counter air training, tactical attack training, aerial refueling training, search and rescue training, and navigation and formation training with the U.S. Navy and Marines in addition to the U.S. Air Force, bilateral/multilateral exercises with the U.S. Marines, and other Japan-U.S. bilateral exercises.

For example, it is consistently conducting bilateral training with U.S. Air Force B-52 and B-1 strategic bombers, etc., in the airspace around the Japan Sea and the East China Sea.

(3) Main Training Activities to Promote Security Cooperation

The ASDF is working to create a security environment favorable to Japan by building and strengthening trust with other countries through the implementation of training to protect Japanese nationals overseas and others as part of the Multilateral Joint Exercises (“Cobra Gold”) and participation in Multilateral Humanitarian Assistance and Disaster Relief (HA/DR) Exercise “Christmas Drop.”

For example, in March 2021, the ASDF conducted overseas flight training with C-2 and other aircraft and visited Ho Chi Minh, Vietnam. Such activities contribute to the freedom of navigation and overflight in the Indo-Pacific region from the perspective of contributions to upholding and reinforcing a “Free and Open Indo-Pacific” and contribute to the stability in the region through cooperation and exchanges with other countries.

4 Main Joint Training Activities

Since 1979, the SDF has been conducting SDF joint exercises to train joint capabilities as field training exercise and command post exercise generally in alternate years. Since 1986, it has also been conducting the Japan-U.S. Bilateral Joint Exercises, “Keen Sword” (field training exercise) and “Keen Edge” (command post exercise)², to train operation procedures of the SDF and the Japan-



“Tomodachi Rescue Exercise” (TRES), joint disaster response exercise with U.S. Forces

U.S. Joint Response Plan for armed attack situations, etc., and to work to enhance the readiness of the SDF and interoperability between Japan and the United States.

(1) Main Training Activities to Strengthen Capabilities for Effective Deterrence and Response to Various Contingencies

The SDF is working to enhance tactical skills concerning amphibious operations through joint amphibious operation training. It is also working to enhance its disaster response capability by conducting SDF joint exercises for rescue (JXR) and remote island disaster relief exercises (RIDEX).

It is working to enhance joint operation capabilities and to strengthen cooperation with relevant organizations concerning the rescue of Japanese nationals and others overseas by conducting exercises in Japan for the rescue of Japanese nationals and others overseas.

Furthermore, in addition to training and exercise in conventional domains, it is working to maintain and enhance the proficiency necessary for the SDF, whose mission is to defend Japan, by conducting comprehensive training and exercises that satisfy the establishment of an appropriate system for new domains.

(2) Main Training Activities to strengthen the Ability of Japan-U.S. Alliance to Deter and Counter Threats


The SDF is strengthening capabilities for effective deterrence and response to various contingencies and working to enhance Japan-U.S. joint response capabilities by conducting Japan-U.S. bilateral joint exercises (Field Training Exercise “Keen Sword” and Command Post Exercise “Keen Edge”). It also enhances guided missile response and air defense combat operation capabilities by conducting joint Japan-U.S. joint air and missile defense exercises.

² This entire SDF and the U.S. Indo-Pacific Command participate in these exercises. Normally an annual event with field training exercises and command post exercises in alternate years, they have been held 15 times to date. In the 2020 exercise, the Royal Canadian Navy participated in some of the training while the United Kingdom, Australia, France, India, the Philippines, and ROK sent observers.

For example, during Keen Sword 21, conducted from October to November 2020, the ASDF joined them in a joint firepower exercise at the Oki Daito Jima Island Bombing and Gunnery Range in addition to the amphibious operation by the GSDF and MSDF, while a Japan-U.S. joint landing exercise was conducted for the first time as a joint exercise on Gajajima Island, located in Toshima Village, Kagoshima Prefecture. This landing exercise, in addition to its role as a Japan-U.S. joint exercise, is aimed at reducing the burden on Okinawa through training relocation as part of the realignment of U.S. Forces for the MV-22s stationed at MCAS Futenma. Elsewhere, the ASDF Space Operation Squadron, newly established in May 2021, participated in joint exercises for the first time in Key Sword 21, where it conducted training in space situational awareness (SSA) for the first time as well as training in joint operation procedures for new domains such as cyber attacks, etc. and electronic warfare.

(3) Main training Activities to Promote Security Cooperation

The SDF is working to enhance joint operation capabilities concerning measures to protect Japanese nationals overseas and others and the various capabilities necessary for international peace cooperation operations by participating in “Cobra Gold,” “Pacific Partnership,” international peace cooperation exercises under the ARF and ASEAN Defense Ministerial Meeting (ADMM), and the Proliferation Security Initiative (PSI).

 See Reference 19 (Record of Main Japan-U.S. Bilateral Exercises in FY2020)
Reference 46 (Participation in Multilateral Exercises [Past Three Years])

4 Objective and Quantitative Evaluation of Maneuver, Deployment and Field Training

In addition to evaluating the results of maneuver, deployment and field training by units and the like, the SDF conducts training inspections under the responsibility of the officer responsible for training at each level from the respective chiefs of staff down, to encourage progress and improvement.

Objective and quantitative evaluation is conducted

when evaluating proficiency by the use of such means as unit training standards and other evaluation standards.

For example, the GSDF evaluates the proficiency results of training objectively and quantitatively by such means as utilizing combat training devices that use lasers under conditions as close as possible to actual combat conditions when conducting training.

VOICE

Voice of a Regimental Commander who Participated in Training by the Support Group for Training Assessment to Further Enhance the Mission Capabilities of the GSDF

Colonel KIHARA Kunihiro, Commander, 39th Infantry Regiment, GSDF (Hirosaki City, Aomori Prefecture) (currently belongs to the Training Evaluation Research and Development Command)

In FY2019, the 39th Infantry Regiment achieved major results in training at the Fuji Training Center (FTC), and also participated in the Japan-U.S. bilateral exercise at the U.S. Army Joint Readiness Training Center (JRTC) in the U.S. mainland. The training at the Hokkaido Training Center (HTC) was the culmination of this. Each exercise had a strict training environment based on its respective objectives and aims, but the training at the HTC took place in the toughest environment in terms of the “battlefield.” The training period was about one month including preparation and long distance maneuvering of about 1,000 km. The period of combat with the “enemy” was nine nights and 10 days, with no interruption in the situation during training. Personnel tasked with raiding operations and

information-gathering continued their missions even if they ran out of water and food.

The training was conducted in a competition style, and the opposing unit was from the only armored division of the GSDF. It was their first experience facing so many tanks and armored vehicles. The power of attacking with roaring sounds and the ability to advance over uneven terrain was incomparable to their daily training. The young personnel were trembling but desperately held their anti-tank weapons. The cooperative troops assigned to them fought with all their might together with the 39th Infantry Regiment, despite the disadvantages of their equipment.

Through this training, which could only be experienced at the HTC, the Regiment gained a “real indicator” to become an even stronger unit. I am certain that the lessons learned from this operation will be reflected in future operations, and that the GSDF as a whole will become even stronger.



Personnel setting up obstacles



A machine gunner returning fire on the “enemy”

VOICE

Enhancing the Various Tactical Capabilities of the Fleet Escort Force

**Captain MOTOYAMA Katsuyoshi, Commander,
Surface Warfare Center, MSDF
(Yokosuka City, Kanagawa Prefecture)**

The MSDF aims to execute its missions by concentrating its efforts in four areas (enhancement of “people,” “functions,” “concepts,” and “cooperation”) in order to possess the capability to respond appropriately to any situation.

The Surface Warfare Center was newly established in October 2020 from the Guided Weapons Education and Training Center, as a center to maximize the capabilities of the fleet and realize the enhancement of “concepts,” one of the four areas, including non-traditional ideas. The center specifically conducts analysis and development of strategies and tactics, gets ready for the improvement of operational and development capabilities of equipment, as well as appropriately manages and shares accumulated knowledge and experience.

In addition to the duties (education and training on guided weapons systems, etc.) of its predecessor the Guided Weapons

Education and Training Center, the Surface Warfare Center’s duties are to develop and improve surface tactics (BMD, anti-aircraft and surface warfare), improve the operation of destroyers and other equipment in various other types of warfare, and provide training and guidance about them.

The ability of the MSDF to complete its missions depends largely on the appropriateness of its strategies, operations, and tactics. Therefore, we must effectively utilize our limited resources to fight and win battles, while boldly adopting flexible ideas in response to changes in the environment surrounding equipment and fighting methods due to technological progress. All of us will work assiduously on developing and improving surface tactics for a powerful fleet.

In addition, the operating personnel need to select and utilize various tactics according to the situation. The Center firmly accumulates and manages knowledge of various tactics and lessons learned in the past, shares them within the fleet through training and other means, and makes all efforts to ensure that they are firmly established.



The author (third from left-hand side in front) engaging in training aboard a warship



In front of the government building at the establishment of the Surface Warfare Center

Section 2

Establishing the Respective Training Environments

1 Training Environment

Given the increasingly severe security situation surrounding Japan, it is important to work to establish units and other organizations and enhance the quality of the training so that the SDF can exert its capabilities to the fullest.

Because of this, SDF training has been planned and conducted under conditions that are as close as possible to actual combat situations, yet it is necessary to further enhance the training environment in order to maintain and enhance the readiness of the SDF. It is against this background that the SDF is promoting initiatives to enhance the training infrastructure in Japan and abroad to conduct efficient and effective training and exercises.

As part of these efforts, the MOD is working to expand the establishment and utilization of domestic maneuver areas in Hokkaido and elsewhere based on the National Defense Program Guidelines for FY 2019 and beyond (NDPG). In June and August 2020, the GSDF Support Group for Training Assessment conducted regiment-level field counter-attack exercises at the Yausubetsu Maneuver Area (Betsukai Town, Notsuke County, Hokkaido, etc.).

Furthermore, the SDF is also facilitating expanded joint/shared use of U.S. Forces facilities and areas located in Japan by the SDF while accounting for relations with local communities.

Furthermore, the SDF will facilitate the use of places other than SDF facilities or U.S. Forces facilities and areas, and the utilization of excellent training environments overseas, such as the U.S. and Australia, and introduce simulators actively.

Elsewhere, facilities are in the process of being established on Mageshima, Kagoshima Prefecture, where the Ground, Maritime, and Air Self-Defense Forces will be able to conduct training and other activities.

1 GSDF

Maneuver areas and ranges are unevenly located and do not have sufficient space. Thus, the GSDF is unable to conduct exercises with large units or artillery training with extended-range cannons for example. These constraints tend to grow as equipment is modernized.

There are also constraints imposed by the urbanization of the areas surrounding maneuver areas and ranges.

Because of this, it conducts live-fire training by surface-to-air guided units and surface-to-ship guided missile units and the like, which cannot be conducted in Japan, in the United States.

In addition, it conducts field training exercises at the division and army levels making maximal use of the limited domestic maneuver areas and the like including those other than large-scale maneuver areas and SDF facilities and areas. It also strives to improve maneuver areas among other matters.

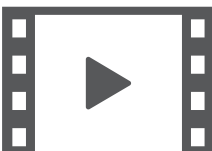
2 MSDF

The timing and location for using sea areas for training are limited by such factors as weather, ocean conditions, marine traffic, and fisheries. Because of this, for example, training that must be conducted in relatively shallow sea areas, such as minesweeping training and submarine rescue training, is being conducted in places such as parts of Mutsu Bay and the Sea of Suonada.

The MSDF also strives to conduct training systematically and efficiently so that a large number of units will be able to produce training results in a short amount of time.



GSDF personnel adjusting laser for quantitative evaluation of proficiency



Video: ASDF anti-aircraft units training with live ammunition using training environments in Japan and overseas

URL: https://youtu.be/YkEhg6prw_g

3 ASDF

Currently, since much of training airspace near Japan is not broad enough, the performance and features of the aircraft cannot be fully exerted in some training. Long hours must be spent at some bases to make round trips to training airspace. Furthermore, in operating airports, it is necessary to take great care regarding aircraft noise in conducting early morning and nighttime flight training.

Because of this, in the Iwo-To training airspace, for

example, aircraft are dispatched successively from the units to conduct training intensively, focusing on training that cannot be conducted sufficiently on the mainland.

In addition, it conducts bombing and gunnery training with live ammunition by such means as joint use of USFJ bombing and gunnery areas.

Other efforts are being made to utilize the overseas training environment such as the live-fire training for Patriot missiles by anti-aircraft units in the United States.

 See Reference 57 (List of Maneuver Areas)

2 Initiatives to Safety Management, etc.

The Ministry of Defense (MOD)/SDF constantly strive as one for safety management, such as by implementing the highest level of safety measures and precautions during routine training.

Despite these efforts, in September 2019, during the maintenance of P-3C Patrol aircraft at MSDF Kanoya Air Base (Kagoshima Prefecture), an engine fell from the aircraft, and directly hit and killed one SDF personnel.

The MOD/SDF is thoroughly implementing measures

to prevent another such accident and expending all possible means to ensure safety.

Any accident that can cause injury to the public, damage to its property, or the loss of life of SDF personnel, must be avoided at all costs. The MOD/SDF as a whole is making its utmost effort to prevent recurrence of such accidents by thoroughly investigating their causes and making sure each member has recognized the importance of safety management once again.

VOICE

The Mission of Those Who Protect the Skies – The SDF's Air Traffic Control

Lieutenant Colonel ETO Tsutomu, Air Traffic Controller, Training Division, Bureau of Defense Policy, Internal Bureau (currently belongs to the Assignment Division, Personnel and Training Department, Air Staff Office)

The SDF's air traffic control must ensure the safety and efficiency of civilian aircraft operations, and also has to take into consideration the special characteristics of the SDF's tactical flight training conducted presuming actions and combat, including measures against airspace violations.

Specifically, in order to quickly and comprehensively exercise defense capabilities from initial response to contingency response, air traffic controllers must cooperate with pilots, flexibly and immediately respond to ever-changing situations and needs, and properly ensure the takeoffs and landings of fighters and other aircraft. This is the mission of air traffic control units,

which hold the key to the success or failure of the various activities of flying units, and it is important to accumulate training to support this mission.

I am working hard on my daily duties with heartfelt pride as an air traffic controller of the ASDF. I am determined to execute my mission when I work in air traffic control units again in the future.



The author ensuring the takeoff and return of a fighter aircraft at an ASDF air traffic control unit



Dual flight training of the air traffic controller of the ASDF, dedicated to understanding details including operational characteristics and maneuvering environment (the writer sitting in the back seat)

Initiatives to Live in Harmony with Regional Society and the Environment

Various activities of the Ministry of Defense (MOD)/ Self-Defense Forces (SDF) are hard to implement without the understanding and cooperation of each and every

person and local governments. Therefore it is necessary to further deepen the trust between regional society and people, and the SDF.

Section 1

Measures to Harmonize with Regional Society and the Environment

The National Defense Program Guidelines for FY2019 and beyond (NDPG) provides that, in recent years, activities, training and exercises of SDF and U.S. Forces Japan (USFJ) are becoming more diverse and defense equipment more sophisticated, and that, as a result, it is becoming all the more important to gain understanding among and secure cooperation from local governments and residents around the defense facilities consisting of SDF facilities and facilities and areas for use by the U.S.

Forces in Japan (USFJ).

Therefore, the NDPG provides that the MOD/SDF will constantly and actively engage in public relations activities with local governments and residents regarding defense policies and activities, and upon fielding units and equipment of SDF or USFJ and conducting training and exercises, the MOD/SDF will make careful and detailed coordination to meet the desires and conditions of local communities, while sufficiently fulfilling accountability.

1 Supporting Civilian Life

The MOD/SDF conduct activities to support the lives of citizens in a range of fields, in response to requests from local governments and relevant organizations. Such activities contribute to further deepening the trust in the SDF, and provide SDF personnel with pride and confidence.

The GSDF handles the disposal of unexploded ordnance and other dangerous explosives found throughout Japan. In FY2020, there were 1,194 such cases (approximately 21.9 tons). In particular, cases handled in Okinawa Prefecture accounted for approx. 43% of the total cases. The MSDF clears and disposes of underwater mines and other dangerous explosives, in FY2020, there were 468 (approximately 3.6 tons).

The SDF not only tries to have interactions with local residents by doing things like opening its camps and bases

to the public to the extent that they do not interfere with unit activities, but also provides transportation and other assistance at a variety of athletic events. In addition, it supports regional medical treatment efforts by providing general medical care at some SDF hospitals as well as conducting urgent transport for emergency patients from isolated islands.

Furthermore, based on national and other policies,¹ the MOD/SDF ensures opportunities for local small and medium-sized enterprises to receive orders, while taking efficiency into account, by such measures as the promotion of separated/divided ordering,² the securing of competition amongst companies within the same qualification and grade divisions,³ and the introduction of the open counter method.⁴

 See Reference 58 (Activities in Civic Life)



Video: FY2020 air review

URL: <https://youtu.be/hrJA0ydISGM>

¹ "The Contract Basic Policy of the Government regarding Small and Medium Enterprises in FY2020" (Cabinet decision on October 2, 2020)

² For example, this is a method through which grouping of products, etc. takes place when putting up the order for general competitive bidding, and then a successful bidder for the groups is decided.

³ This means that out of the bidding participation eligibility categorized into grade A-D, there is competition between grade C or D only, which comprise mostly small and medium enterprises.

⁴ The "open counter method" means the so-called "public solicitation-type estimate adjustment system," in which when procuring a good or service at or below a threshold value, the tendered item is subjected to public solicitation, resulting in a large number of businesses submitting estimates, instead of adjusting estimates with specified businesses as before.

2 Cooperation from Local Governments and Other Relevant Organizations for the SDF

(1) Recruitment of Uniformed SDF Personnel and Cooperation with Re-employment Support

Amid the harsh recruitment and employment situation, the cooperation from local governments and relevant organizations is vital to secure highly qualified personnel and to support the re-employment of uniformed SDF personnel who retire at relatively young ages.

(2) Support for and Cooperation with SDF Activities

The SDF camps and bases maintain close relations with regional society, and therefore, various forms of

support and cooperation from the local community are indispensable for the SDF to conduct its diverse activities, including education and training, and disaster relief. Moreover, units dispatched overseas for international peace cooperation operations and other duties receive support and cooperation from the relevant organizations for the procedures involved.

The MOD/SDF are further strengthening cooperation with relevant entities such as local governments, police and fire services in order to ensure immediate and sure activities by the SDF in various contingencies.

3 Activities for Securing Understanding and Cooperation of Municipal Governments and Local Residents

Regional Defense Bureaus established in eight locations nationwide make efforts to build cooperative relationships with their respective local communities, through collaboration with SDF units and Provincial Cooperation Offices. In FY2020 the bureaus provided local communities with explanations on a variety of training including Japan-U.S. bilateral training, development of SDF facilities on Mageshima, and plan to deploy Ground Self-Defense Force (GSDF) V-22 Ospreys at KYUSHU-SAGA International AIRPORT.

Also, the bureaus conducted liaison and coordination with local governments in response to typhoon, heavy rain and other disasters. They also implemented measures to promote understanding of the defense policy in general by providing all prefectures and municipalities with explanations on the Defense White Paper and also by holding the first online seminars on defense issues in light of the COVID-19 crisis among other things.

 See Fig. IV-5-1-1 (Work to Develop Regional Cooperation)

Fig. IV-5-1-1 Work to Develop Regional Cooperation

1 Measures concerning coordination with local governments for smoothly implementing projects

Coordination with local governments regarding the reorganization, etc., of SDF units and training, etc., of the U.S. Forces

2 Measures concerning responses to incidents and accidents wherein the SDF, etc., are involved

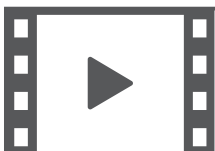
Required cooperation in collaboration with the SDF, etc., such as information provision to local governments

3 Measures for the purpose of taking effective actions for various contingencies

Required support for those such as SDF units and local governments under large-scale disasters or other events and participation in training

4 Measures with the aim of obtaining understanding of the defense policy in general

Holding of sessions to explain the content of Defense of Japan and seminars on defense issues, targeting local governments and residents



Video: The MSDF Okinawa force handling the disposal of unexploded ordnance
URL: <https://www.youtube.com/watch?v=-DgagJ8p5uA>

4 Measures to Promote Harmony between Defense Facilities and Surrounding Areas

1 Features of Defense Facilities and Projects Related to Harmony with the Surrounding Areas

Defense facilities are diverse in their use, and often require large volumes of land. In addition, as of January 1, 2021, approximately 29% of the land area and 30 of the 78 facilities and areas (for exclusive use) of the USFJ are jointly used by the SDF in accordance with the Japan-U.S. Status of Forces Agreement, with the purpose to enhance the diversity and efficiency of Japan-U.S. bilateral training and exercises. Meanwhile, problems related to restricted establishment and operations of defense facilities have emerged due to the urbanization of areas around many of the defense facilities. Also, another problem is that frequent aircraft operations such as takeoffs and landings cause noise and other issues, impacting the living environment of local residential communities.

With that being said, defense facilities, as the foundation that supports the defense capabilities of Japan and the Japan-U.S. Security Arrangements, are indispensable for our country's security. Therefore, in order for the facilities to exert their full function, it is necessary to maintain conditions for constant and stable utilization by ensuring harmony between the defense facilities and the surrounding areas as well as obtaining the understanding and cooperation of the local residents.

For that purpose, the MOD has taken measures to prevent, reduce or mitigate aircraft noise and other impacts caused by activities of the SDF or the USFJ, or by the establishment/operations of airfields and other defense facilities in the surrounding areas since 1974 based on the Act on Improvement of Living Environment of Areas Around Defense Facilities (Living Environment Improvement Act), etc.

Taking into consideration the requests from the relevant local governments, the MOD partially revised the Living Environment Improvement Act in 2011, and conducted a review to enable the Specified Defense Facilities Environs Improvement Adjustment Grants to be applied to so-called soft projects, such as aid for medical expenses. In addition, the MOD added defense facilities to be eligible for these grants. Focused work is also underway to provide soundproofing for housing.

Regarding the Specified Defense Facilities Environs Improvement Adjustment Grants, the MOD has implemented initiatives such as the PDCA Cycle process since April 2014, aiming to increase the effectiveness of these grants.

In response to the requests by the relevant local governments, the MOD continues to study how the measures to harmonize defense facilities and surrounding areas should be in an attempt to make them more suitable, effective and efficient, in consideration of the severe fiscal situation.


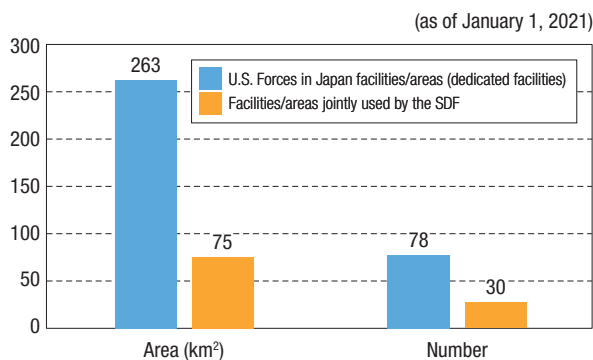
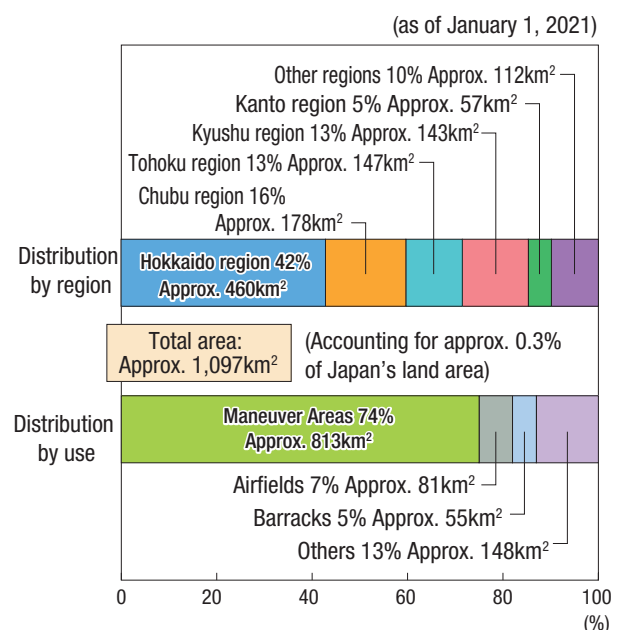
-  Fig. IV-5-1-2 (Joint Use Status of U.S. Forces in Japan Facilities/Areas [Dedicated Facilities] with the SDF)
- Fig. IV-5-1-3 (Status of SDF Facilities [Land Plots])
- Fig. IV-5-1-4 (Status of Facilities and Areas of U.S. Forces in Japan [Exclusively Used Facilities])
- Fig. IV-5-1-5 (Costs for Measures in Areas Around Defense Facilities [Based on Contracts in FY2021])
- Reference 59 (List of U.S. Forces Japan Facilities/Areas [including joint use facilities])

Fig. IV-5-1-2 Joint Use Status of U.S. Forces in Japan Facilities/Areas (Dedicated Facilities) with the SDF



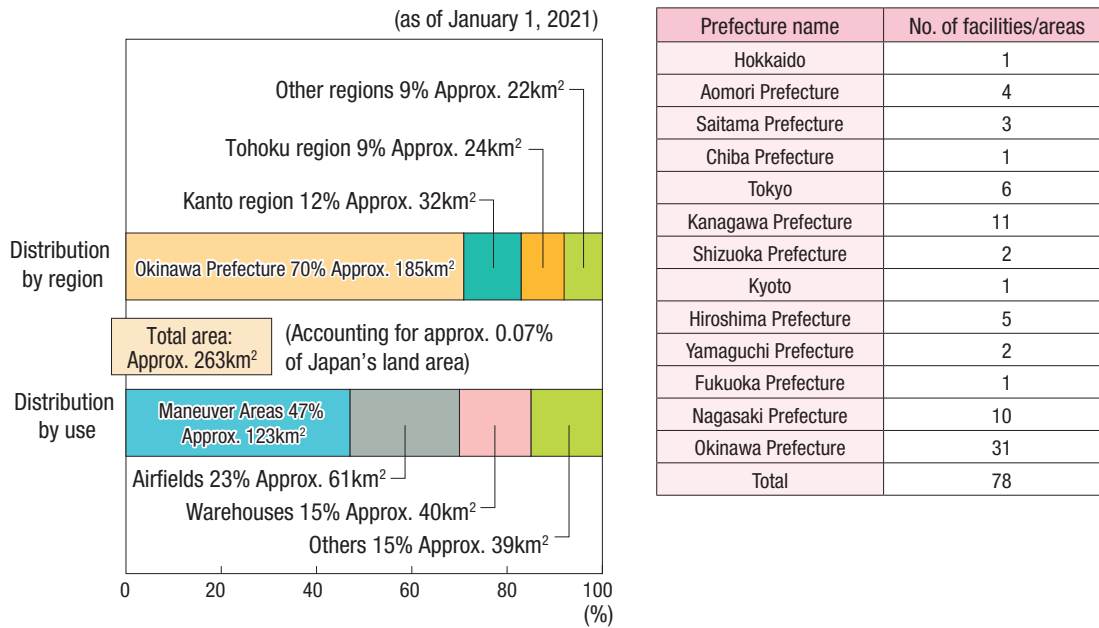
(Note) Area figures are rounded.

Fig. IV-5-1-3 Status of SDF Facilities (Land Plots)



Notes: Numbers may not add up to 100 due to rounding.

Fig. IV-5-1-4 Status of Facilities and Areas of U.S. Forces in Japan (Exclusively Used Facilities)



Notes: Numbers may not add up to 100 due to rounding.

Fig. IV-5-1-5 Costs for Measures in Areas Around Defense Facilities (Based on Contracts in FY2021)

(Unit: 100 million yen)

Project	Mainland	Okinawa
Disturbance prevention projects	107	5
Noise prevention projects	608	149
Measures related to relocations	46	4
Subsidized projects for stabilizing people's lives	220	111
Road improvement projects	56	14
Environs Improvement Adjustment Grants	194	34
Other projects	12	7

2 Efforts to Develop Understanding and Cooperation Concerning the Stationing of the USFJ

Amid the increasingly severe security environment surrounding Japan, maintaining the presence of the USFJ and its readiness is vitally important for ensuring the security of Japan.

For stable stationing of the USFJ, it is essential to obtain the understanding and cooperation of the local governments and residents in the vicinities of defense facilities.

For this purpose, the MOD will work to share this recognition with the United States at various levels including the Japan-U.S. Defense Ministerial Meeting. The ministry will also constantly take various measures, including coordination for unit operation of the USFJ

with the local governments and other parties, provision of subsidies pertaining to the USFJ realignment, prompt information provision to the local government in a case of incident or accidents, and exchange promotion between the USFJ and local residents.

(1) Coordination for Unit Operation of the USFJ with the Local Governments, etc.

The MOD is working to promote local understanding of the maintenance of USFJ facilities and unit operations through coordination, including prior explanation to the relevant local municipalities and residents at every occasion of USFJ realignment, training, unit deployment, new equipment deployment, etc.

(2) Grants, etc., to Promote the USFJ Realignment

During a period of time before and after the implementation of the USFJ realignment⁵ (10 years in principle), realignment grants⁶ are provided to help to cover the expenses of projects,⁷ which contribute to improving the convenience of the residents' lives in local municipalities affected by the realignment, and to stimulate the local industries. These grants are provided in accordance with the progress of the realignment, after the Defense Minister designates the specified defense facilities and neighboring municipalities affected by the realignment.

As of April 2021, 14 municipalities for nine defense facilities are eligible to receive the realignment grants.

⁵ Approximately 4.8 billion yen in the FY2021 budget

⁶ Under the Act on Special Measures for Smooth Implementation of the Realignment of the United States Forces in Japan, changes in the composition of naval fleets (replacement of the aircraft carrier, at Commander Fleet Activities Yokosuka, with a nuclear aircraft carrier) that integrally operate with air wings subject to the realignment are treated in the same way as the realignment.

⁷ As stipulated in Article 2 of the Enforcement Ordinance of the Act on Special Measures for Smooth Implementation of the Realignment of the United States Forces in Japan, there are 14 specific projects including education, sports, and cultural projects.

In order to promote the realignment, additional measures are taken with budgetary provision.

 See Reference 60 (Outline of Measures to Promote Harmony Between Defense Facilities and Surrounding Areas)

(3) Ensuring Safety of Operations of the USFJ

Ensuring the safety of local residents is of prime importance in USFJ operations, and no accident or incident must occur.

In the event of a crash, component fall/loss, precautionary landing on civilian airports,⁸ etc., of U.S. Forces aircraft, the MOD urges the United States to make exhaustive measures for safety management and recurrence prevention as well as prompt information provision. The ministry also requests measures such as suspension of flying according to the individual case. The MOD promptly provides the relevant local governments, etc., with explanation of the obtained information and takes measures to ensure prompt and appropriate compensation for the damage caused by the incident or accident.

The MOD not only listens to the results of accident investigation and recurrence prevention measures of the United States but also uses expert knowledge of the SDF to determine their reasonableness.

Furthermore, in July 2019, another effort was made by revising the guidelines concerning aircraft accidents in order to further refine the applicable policies and procedures in case of an accident caused by U.S. military aircraft accidents outside of U.S. Forces facilities and areas in Japan.

Considering anxiety and concerns among local residents, Japan has been fully communicating its approach to the U.S. side including at the top and ministerial levels. The two countries closely cooperate to secure safe operation as the top priority.

The MOD is also concerned about the increasing trend of accidents/incidents due to drinking caused by U.S. Forces military personnel and others and has requested the U.S. side on multiple occasions to reinforce official discipline and personnel education.

The United States has also taken measures for its part, putting in place its guidelines for off-duty action (liberty policy), including measures such as alcohol restrictions at nighttime as well as curfews applying to U.S. Forces personnel ranked below a certain rank. Both the countries will continue cooperation to prevent recurrence of incidents related to drinking.

In addition, the Government of Japan prepared Crime Prevention Measures in Okinawa in June 2016 to deter crime in Okinawa Prefecture and ensure the safety and security of the people of Okinawa. Bolstering crime

prevention patrol operations and establishing a safe and secure environment are the pillars of the Measures.

The MOD is participating in the Okinawa Local Safety Patrol Corps established in the Okinawa General Bureau and will continue to cooperate with the relevant ministries and agencies to make it an effective crime-prevention effort.

(4) Promoting Exchange between the USFJ and Local Residents

The MOD holds a Japan-U.S. exchange program to deepen mutual understanding between Japan and the United States with the understanding and cooperation of the local governments and USFJ. Under the program, residents living near USFJ facilities and areas together with USFJ personnel enjoy sports, music and cultural exchanges.

The USFJ also has initiatives to deepen mutual understanding with people of the local communities, which include opening up of its bases (Friendship day) and information provision through websites and social media.

(5) Other Measures (Including Measures Pertaining to the SDF)

(1) Compensation for Fisheries

The MOD defines the confined water for training, etc. carried out by the SDF or the USFJ using water surface based on laws (Article 105-1 of the Self-Defense Forces Law or Article 1 of the Act to Restrict the Operation of Fishing Boats) or a contract and compensates for losses incurred from the restriction.

As an administrative measure to help people who suffered losses in their fishery operation due to the restriction or prohibition based on the provisions of the acts but cannot receive compensation under the provisions of the acts, the MOD provides relief money to people who satisfy certain requirements.

(2) Base Subsidy, etc.

The MOD provides cooperation by doing such things as providing various information also for the subsidy for municipalities where national defense facilities are located (“Base Subsidy”), and the Adjustment Grants for municipalities where defense facilities are located (“Adjustment Grants”), both of which are under the defense facilities-related subsidy system under the jurisdiction of the Ministry of Internal Affairs and Communications.

The base subsidy has been established considering that, among the facilities of the U.S. forces or the facilities used by the SDF, the land used for airports and

⁸ Landing when the pilot, etc., detects a sign of abnormality in the aircraft while flying

Column

Support for Infrastructure Development in Regional Societies

In order to maintain stability in the lives of residents and improve their welfare, the MOD provides subsidies to local governments for various living environment improvements designed to address impacts caused by defense facilities. In addition, it also provides grants that can be used to subsidize medical expenses, etc., to surrounding municipalities where the establishment and operation of defense facilities have a particularly significant impact on the living environment.

Example of parks



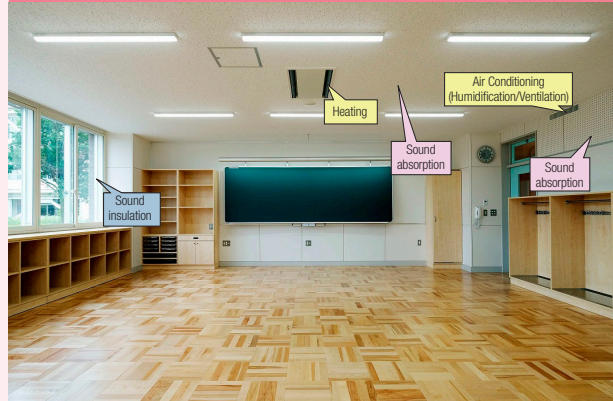
(Photo provided by Gotemba City, Shizuoka Prefecture)

Gotemba City, which is adjacent to the East Fuji Maneuver Area, received subsidies for the construction of a park to facilitate the residents' lives, such as in the case of evacuation.

For example, when the presence of a maneuver area or an airfield affects the lives of local residents, the MOD subsidizes construction of parks and other facilities to facilitate the residents' lives, such as in the case of evacuation.

To prevent and reduce noise caused by aircraft takeoffs and landings in areas near Self-Defense Forces' and U.S. Forces' installations, the MOD subsidizes soundproofing work at schools, hospitals, and other facilities that require quiet environments.

Example of soundproofing work



(Photo provided by Shibeche Town, Hokkaido)

Soundproofing work involves installation of soundproof sashes to block outdoor noise (sound insulation), installation of air-conditioning equipment to keep the enclosed indoor environment comfortable (ventilation, dehumidification, and temperature maintenance), and installation of sound-absorbing materials on indoor walls and ceilings (sound absorption).

maneuvering grounds covers a vast area that is a big part of the municipality area, which has a significant impact on municipal finance. The subsidy has a nature of substituting for fixed property tax and is granted to municipalities where national properties (land, building and structure) provided for use by the USFJ or the SDF are located.

The Adjustment Grants have been established because

the Base Subsidy is not granted to municipalities where properties constructed or set up by the U.S. forces ("USFJ properties") are located despite their exemption from fixed asset tax, and also considering the tax-fiscal impact of the municipal tax exemption for U.S. Force personnel and civilian employees. The grant is provided to municipalities where the U.S. Force property is located.

5 Participation in National Events

The SDF presents ceremonies including guards of honor, lining up and gun salutes to the Emperor, state guests and others at national events. A guard of honor to state guests from foreign countries at their welcome reception is essential for diplomatic procedure.

At the Sokuirei-Seiden-no-gi (Ceremony of the Enthronement of His Majesty the Emperor at the Seiden [State Hall]), the GSDF fired salutes in the Kita-no-maru area of the Outer Gardens of the Imperial Palace. At the

celebration parade in November of the same year, the GSDF, Maritime Self-Defense Force (MSDF), Air Self-Defense Force (ASDF), the National Defense Academy and National Defense Medical College conducted guards of honor, playing music and lining up. In addition to the members who were assigned to these duties, many other members participated in the event, including preparation for the implementation by the SDF.

6 Activities for Tokyo Olympic and Paralympic Games

1 Cooperation by the SDF in Past Olympic Games and Performance of SDF Athletes (since the 1964 Tokyo Olympic Games)

At the opening ceremony of the 18th Olympic Games held in Tokyo in 1964, Blue Impulse aircraft drew grand Olympic rings in the sky of Tokyo, the SDF band played the Olympic march and a fanfare, while students

of the National Defense Academy held up the placards of the participating countries. Twenty-one SDF athletes participated in the games. Among them MIYAKE Yoshinobu won the first place in weight lifting and TSUBURAYA Kokichi became third in the marathon.

Since then, the SDF has participated in Olympic Games, with SDF athletes winning eight gold medals, four silver medals and eight bronze medals in total.

VOICE

Voices of Personnel Challenging Themselves to Stay Motivated for the Olympic Games

Sergeant First Class OTOGURO Keisuke, Special physical education training course student, SDF Physical Training School (Asaka City, Saitama Prefecture)

I started wrestling in the first grade of elementary school and trained with the goal of winning in the Olympic Games. Since joining the SDF Physical Training School in 2019, I have been training every day and have overcome various hardships to win an offer to represent Japan at the Tokyo Olympic Games.

When the Tokyo Olympic Games were postponed, I thought that year was a tailwind that could increase my chances of winning. I immediately analyzed myself and maintained my motivation by changing my mindset as soon as possible and taking action to further strengthen my muscle strength and basic physical fitness, which were necessary for the rank I had moved up to in order to participate in the Tokyo Olympic Games.

Sergeant NAMIKI Tsukimi, Special physical education training course student, SDF Physical Training School (Asaka City, Saitama Prefecture)

I started boxing in junior high school and had never been defeated in my official high school matches. Since joining the SDF Physical Training School in 2017, I have been working hard every day in matches, like winning a bronze medal in my first appearance at the World Championships under strict training. I finished second in the Asia-Oceania continental qualifying round and qualified for the Tokyo Olympics.

Amid these circumstances, with the postponement of the Tokyo Olympic Games due to COVID-19, and restrictions on practice, I was bewildered by the things that did not go as planned. But I realized that I now had more time to review and improve my level of competition. Once I had a clear idea of what I needed to do to make myself stronger in 2021 than in 2020, I managed to think positively about the postponement,

With the goal of winning at the Tokyo Olympic Games, I will continue training hard every day so that I can inspire and give courage to the people of Japan, as well as SDF personnel and medical personnel throughout the country.



The author (red singlet) at the 2019 All Japan Wrestling Championships

which increased my motivation and enabled me to practice more efficiently.

With the goal of winning at the Tokyo Olympic Games, I will continue to work hard to bring smiles to many people who support me, and to give them dreams, courage, and inspiration.



The author (right) at the 2018 All-Japan Championships

2 Cooperation in Tokyo 2020 Olympic and Paralympic Games

With the aim of strengthening efforts for the Tokyo 2020 Olympic and Paralympic Games (hereafter referred to as “Tokyo 2020 Games”), the MOD/SDF Special Action Committee on the 2020 Tokyo Summer Olympics and Paralympics led by the Minister of Defense was set up in September 2013.

At the first committee meeting, then Defense Minister Onodera explained the significance of the cooperation and participation of the MOD/SDF and stated that SDF personnel would make full efforts for Japan’s security and work for successful games with the spirit that all SDF members were participants.

At the 12th committee meeting in December 2019, it was decided that the MOD/SDF would take security measures, including warning and surveillance of the sky and sea area of Japan, including the area around the venues, relief provisions for victims in an event of a

large-scale terrorist attack, and response to cyber attacks.

Regarding cooperation with game operations, including ceremonies, the MOD/SDF had been conducting coordination with the Tokyo Organising Committee of the Olympic and Paralympic Games on cooperation items (Olympic flame arrival ceremony, hoisting of national and other flags, medical services at the venue for shooting sports, marine rescue in sailing, control in and outside of venues, and operation of archery, shooting and modern pentathlon) and decided to implement the items at the official request of the organizing committee.

In March 2020, the ceremony for the arrival of the Olympic flame was held at Matsushima Airbase of the ASDF, who cooperated by the flight of the Blue Impulse using smoke in the Olympic colors and music played by its military band. Later that month, the Tokyo 2020 Games was decided to be postponed and held in summer of 2021. The MOD/SDF continues to cooperate with the organizing committee to prepare for the Games.

7 Support for Antarctic Research

The SDF has been providing transportation for personnel and supplies and other cooperation for the scientific research in Antarctica conducted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) since 1965, when Antarctic research was resumed, with the icebreaker JS Fuji, since 1983 with icebreaker JS Shirase, and since 2009 with the second-generation icebreaker JS Shirase.

For the 61st Antarctic Research Expedition, from November 2019 to April 2021, the SDF provided support for the transportation of a total of 135 people and approximately 1,400 tons of supplies, support for sea and land observations, and support for base construction.

For the 62nd Antarctic Research Expedition, from November 2020, the SDF provided support for oceanic observations in the sea area around Antarctica. The lengthy activities spanned over approximately 30,000km,

and made major contributions to the Antarctic research project of Japan.

 Reference 61 (Achievements of Antarctic Research Expedition)



Hello penguins!



Video: “Shirase in ice-covered waters”: JS Shirase in support activities for the 61st Antarctic Research Expedition

URL: <https://www.youtube.com/watch?v=1BvjHkBNkiY>

8 Civil Engineering Consignments from Third Parties

The SDF receives consignments of civil engineering projects, etc., conducted by the state and local governments when the projects conform to the purpose of the SDF training. The GSDF, since its establishment, has received 8,270 consignments of civil engineering projects from third parties.

In 2020, the GSDF was consigned by the Mayor of Shibata Town, Miyagi Prefecture, to conduct site preparation work for the construction of a disaster prevention location/comprehensive gymnasium in Shibata Town in Shibata County, Miyagi Prefecture.

Approximately 50 GSDF personnel worked approximately 70 days to prepare the 32,000m² site.

The consignment had been requested because the establishment of the location was urgently required but a private contractor could not be secured due to such factors as Great East Japan Earthquake Disaster-related civil engineering projects.

The GSDF is contributing to local disaster prevention countermeasures and strengthening cooperation with local communities through these activities.

 See Reference 62 (External Construction Project Achievements)

9 Other Initiatives

1 Response to Cases of Interference against SDF and U.S. Forces Aircraft by Laser Irradiation and Kite Flying

Cases of interference by laser irradiation and kite flying against the SDF and U.S. Forces aircraft in flight have been occurring frequently. These are extremely dangerous and malicious acts that may disrupt a pilot's ability to operate aircraft and result in a catastrophe such as a crash. Therefore, the MOD disseminates information regarding the risks involved in these acts to local residents by putting up posters and requests their cooperation in reporting to the police while closely cooperating with relevant local governments. Additionally, the Ordinance for Enforcement of the Civil Aeronautics Act was revised in December 2016, making these interference acts subject to regulation as well as fines and other penalties.

2 Response to Small Unmanned Aerial Systems Mainly Drones Flying over Defense Facilities and Surrounding Airspace

In recent years there have been terror attacks overseas (including attempted ones) using small drones, including commercial drones, some of which are targeted at military facilities. Given such a situation, there is a concern that drone terror attacks on the SDF/USFJ facilities and areas can also happen in Japan, and if these facilities are endangered, the function as foundations to defend our nation can be seriously affected. To address such a concern, the Act on Prohibition of Flight of UASs around and over Key Facilities commonly known as the "Drone Act" was enforced on June 13, 2019, to prohibit small drones from flying over the SDF/USFJ facilities and

areas designated by the Minister of Defense. As of the end of March 2021, 54 SDF facilities where major SDF Headquarters, etc., are located, and 15 USFJ facilities and areas have been designated for the prohibition.

 See Reference 63 (A List of the Defense-related Facilities Designated under the Drone Act)

3 Response concerning the Use, Management, etc., of Land in Areas Surrounding Defense Facilities

In accordance with a statement by the National Security Strategy, established in December 2013, that Japan will review issues related to the use of land in areas such as areas surrounding defense facilities from a national security viewpoint, the MOD has, since FY2013, been conducting research to secure a systematic understanding of the situation of land ownership in areas surrounding defense facilities. On July 17, 2020, the Government of Japan issued the Basic Policy on Economic and Fiscal Management and Reform 2020 by Cabinet Decision, where it was stated that "from the standpoint of national security, the government will strive to ascertain the status of property ownership through information gathering and other means by the relevant government offices, and the government will take the necessary measures after considering of how best to use and manage property." According to this statement, the Cabinet Secretariat reviewed the issues based on, among other things, recommendations from the Advisory Panel on assessment of the actual state of land use, etc. After this consideration, the Bill on Review of Real Estate Ownership and Regulation of Its Use near Sensitive Facilities and on Border Islands was approved by Cabinet Decision on March 26, 2021 and submitted to the 204th

Diet. On the situation where the security environment is becoming more severe and uncertain, the bill authorizes designation of areas surrounding sensitive facilities and on remote islands near national borders to be protected against interference from the land, etc., investigation and

if necessary regulation of land use in the areas. This bill has great significance for the purpose of fully ensuring the functions of defense facilities, which are the foundations of national defense.

Section 2

Addressing Environmental Issues

A sense of crisis regarding the sustainability of the global environment has been mounting internationally. In 2015 countries around the world advanced initiatives, such as the adoption of the Sustainable Development Goals (SDGs) at the United Nations and the Paris Agreement, which is an international framework concerning climate change.

Marine plastic pollution and climate change were important topics at the G20 Summit held in Osaka in June 2019. Just before the summit, the first Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth was held with the attendance of relevant ministers of the participating countries.

Japan also formulated the Fifth Basic Environment Plan at the cabinet in 2018 and has been working to realize a sustainable society. At the SDG Summit in September 2019, Japan expressed the intention to further accelerate initiatives in Japan and abroad by the next SDG Summit.

Concrete measures are being taken by the government, such as setting the achievement of a decarbonized society by 2050 as a goal in October 2020.

In response to the acceleration of domestic and overseas initiatives, the MOD, as part of the government, also needs to contribute to solving environmental problems, while at the same time implementing measures with more focus on the coexistence of SDF/USFJ facilities and areas with surrounding areas.

From this perspective, the MOD will reorganize the Bureau of Local Cooperation in FY2021 in order to develop the organization so as to be able to centrally and effectively address environmental issues by establishing a division in the reorganized bureau to be responsible for the overall environmental policy of the MOD/SDF. The MOD will continue to undertake the promotion of further measures under the new institutional framework.

1 Efforts Related to the MOD/SDF Facilities

As a member of the government, the MOD has complied with the laws and regulations related to the environment and strived to be thorough in protecting the environment and to reduce the burden on the environment. It will work to further promote initiatives regarding the environment under the “Policy of the Ministry of Defense on Consideration for the Environment.”

1 Setting Up the MOD Climate Change Taskforce

In April 2021, Minister of Defense Kishi Nobuo attended the “Climate Security” breakout session at the Leaders’ Summit on Climate hosted by the U.S. government, where he explained the impact of climate change on security and the measures being taken by the MOD/SDF on climate change, and announced that he would set up a taskforce in the MOD to mobilize the entire ministry for its response to tackle the challenges imposed by climate change.

The MOD Climate Change Taskforce was set up as announced by Minister Kishi with the State Minister of Defense as its chair in May, when it also held its first meeting. The purpose of the taskforce is to evaluate and analyze the impact of climate change on Japan’s security and to take measures required of the MOD.

2 Procuring Renewable Energy Electricity

Global warming and climate change are issues that not only may affect peace and stability in the international

community but also have various negative effects on people’s daily lives. Therefore, the MOD/SDF, being responsible for 250,000 SDF personnel and operate facilities and various equipment all around Japan and an institution of the Government of Japan and its largest consumer of electricity (accounting for approximately 40% of total government consumption), has decided to use as much electricity generated by renewable energy sources (hereafter referred to as “renewable energy electricity”) as possible in procuring electricity. This initiative was determined as policy by the MOD/SDF in December 2019. In the policy, given its nature as public procurement as well as the existence of severe economic circumstances, it was decided that for procuring renewable energy electricity, electricity containing renewable energy electricity would be procured at all MOD/SF facilities while taking into consideration such matters as the need to secure competitiveness even when procuring renewable energy electricity, to have the electricity supplied in a stable manner, and to keep the price of the electricity low, and the characteristics of the region where the facility is located. The procurement of electricity is conducted individually for each of the facilities, etc., of the MOD/SDF, with the number of such contracts reaching approximately 1,000 in FY2021. Of this number, 526 facilities, etc., procured electricity containing renewable energy electricity, approximately 3.5 times the number for the previous year. Of these facilities, etc., 282 concluded contracts for electricity of

Fig. IV-5-2-1

FY2021 List of Facilities That Have Introduced Renewable Energy (top 10 facilities by estimated energy consumption on a contract basis)

	Name of facility, etc.	Estimated energy consumption	Renewable energy ratio
1	National Defense Medical College	31,911,672 kWh	50%
2	GSDF Camp Higashi Chitose	22,119,258 kWh	100%
3	ASDF Iruma Air Base	21,593,000 kWh	50%
4	ASDF Hamamatsu Air Base	19,489,652 kWh	50%
5	MSDF Headquarters Ominato District	14,964,965 kWh	100%
6	ASDF Chitose Air Base	14,822,600 kWh	100%
7	GSDF Camp Mishuku	13,671,060 kWh	50%
8	ASDF Gifu Air Base	13,418,684 kWh	100%
9	GSDF Camp Kasumigaura	11,899,000 kWh	50%
10	MSDF Kanoya Air Base	11,892,216 kWh	100%

100% renewable energy sources origin. The expected amount of renewable energy electricity procured in FY2021 is 620 million kWh (annual electricity consumption of more than 150,000 general households), an approximately 6.8 times increase from the previous year. It means that approximately 48.7% of all electricity expected to be used by the MOD/SDF (approximately 1.28 billion kWh) in FY2021 will be procured in the form of renewable energy electricity. Some of the facilities able to procure renewable energy electricity were large, such as the National Defense Medical College, the second largest facility of the MOD/SDF. Various efforts will be made to raise the proportion of renewable energy electricity with the goal of ultimately reaching 100%.



Fig. IV-5-2-1 (FY2021 List of Facilities That Have Introduced Renewable Energy [top 10 facilities by estimated energy consumption on a contract basis])

3 MOD's Action Plan for PFOS Disposal

The MOD has established the Action Plan for PFOS Disposal regarding aqueous film-forming foam containing PFOS and is swiftly proceeding with the replacement and disposal of film-forming foam with the goal of completing it in principle by the end of FY2021 and by FY2023 in naval vessels.

2 Efforts on the USFJ Facilities and Areas

USFJ strives to act according to appropriate environmental management to protect the environment in the surrounding areas and to secure the safety of U.S. military personnel and residents in the surrounding areas according to the Supplementary Agreement on Cooperation in the Field of Environmental Stewardship and the Japan Environmental Governing Standards (JEGS) established by USFJ.

1 Efforts to Save Utilities

In USFJ facilities and areas, efforts are made to save utilities, which include changes to energy-efficient heating/ventilation/air-conditioning equipment; installation of motion sensors for lights-out during absence; installation of solar panels; reduction of the period to use cooling/heating equipment and review of the preset temperature; and control of lighting and lights-out for night lighting, for example.

2 Responding to Issues concerning PFOS

In April 2020, in order to address an aqueous film-forming foam spill incident that occurred at Futenma Air Station, the Government of Japan and the relevant local governments accessed an area/facility under the Agreement on Cooperation in the Field of Environmental Stewardship for the first time upon an environmental accident. The government is working together on the string of issues surrounding PFOS and progress is being made on such efforts as setting provisional target values for tap water and water environments and the rapid replacement and disposal of aqueous film-forming foam in the possession of the SDF and firefighters. Furthermore, the Japan and U.S. governments are cooperating on and studying with focus the replacement of aqueous film-forming foam in the possession of USFJ and other matters. MOD/SDF will continue to cooperate closely with the relevant ministries and agencies, related local governments, and the U.S. side in order to dispel the concerns of the local residents.

Framework for Environmental Management of U.S. Forces Facilities and Areas in Japan

Under the Status-of-Forces Agreement, the operations of the U.S. Forces at military facilities and areas in Japan shall be carried out with due regard for the public safety. Based on this principle, the Government of Japan places great importance on protecting the environment during U.S. Forces operations. The two countries have held discussions on numerous occasions to ensure that strict environmental management of facilities and areas is performed.

At the Japan-U.S. “2+2” meeting on September 11, 2000, based on a common recognition on the importance of protecting the environment, a common goal was agreed upon to ensure the health and safety of Japanese residents in communities adjacent to facilities and areas, as well as the personnel of the U.S. armed forces in Japan and their dependents, through the Joint Statement on Environmental Principles.

On September 28, 2015, the Agreement on Cooperation in the Field of Environmental Stewardship Relating to the United States Armed Forces in Japan, which supplements the Japan-U.S. Status-of-Forces Agreement, came into effect in order to strengthen environmental measures related to U.S. Forces facilities and areas used by the U.S. Forces in Japan.

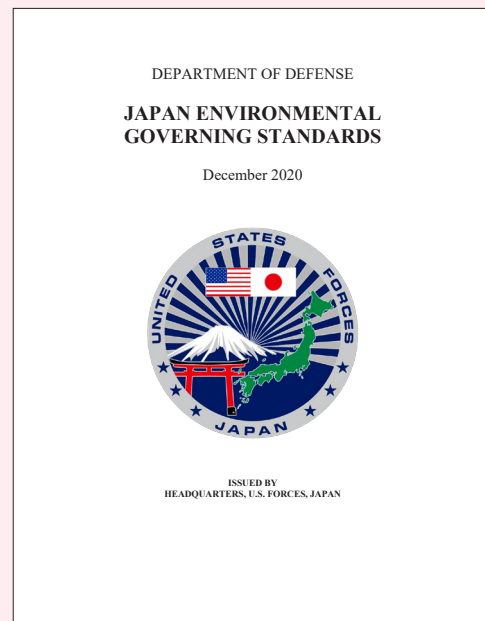
This agreement, called the Supplementary Agreement on Cooperation in the Field of Environment, is a legally binding international agreement that provides for the sharing of information between Japan and the United States, access to the facilities and areas based on notification from the United States following a contemporaneous environmental incident, access for site surveys prior to return to the facilities and areas, and for the United States to issue and maintain Japan Environmental Governing Standards (JEGS).

The JEGS is an environmental management standard for the U.S. Forces in Japan within their facilities and areas. In general, it adopts the more protective and applicable United States standards, Japan standards, or international agreement standards for environmental protection. The Ministry of Defense, in cooperation with related ministries and agencies,

is strengthening consultations between the United States and Japan on issues such as cooperation regarding periodic reviews of the JEGS, exchange of information on the environment, and dealing with environmental pollution.

Realizing a sustainable society requires that all of its members are aware of their responsibility to the environment and that they voluntarily and proactively reduce their environmental impact as much as possible. With this in mind, the MOD will continue to work closely with relevant local governments and the United States to ensure thorough environmental management at the U.S. Forces facilities and areas in Japan.

Click here for the MOD's environmental initiatives website ▶



Japan Environmental Governing Standards (JEGS) (2020 version)

Section 3

Public Relations Activities, Public Records and Archives Management, Information Disclosure, and Related Activities

1 Various Public Relations Activities

As the activities of the MOD/SDF cannot be carried out without the understanding and support of the Japanese people, it is important to be proactive in undertaking easily comprehensible public relations activities and to gain the trust and cooperation of the public.

According to a “Public Opinion Survey on the Self-Defense Forces and Defense Issues” conducted by the Cabinet Office (in January 2018), public expectations and evaluations towards the SDF have been increasing as the scope of MOD/SDF activities has expanded both domestically and internationally. In light of this result, the MOD/SDF will continue to conduct a variety of PR activities, thereby striving to ensure better understanding of the current status of the MOD/SDF.

In addition, given that understanding and support from foreign countries are also of utmost importance for the SDF to conduct its missions successfully, it is essential that the MOD strengthens efforts to provide information to the international community about MOD/SDF initiatives, including SDF activities abroad.

See Reference 64 (“Public Opinion Survey on the Self Defense Forces and Defense Issues” [excerpt] [Public Relations Office of Cabinet Office])

1 Providing Information Both Domestically and Internationally

The MOD/SDF conducts active PR activities through official websites, social media (Social Networking Services) and video distribution, utilizing the Internet.

The MOD has also been making great efforts to provide accurate information in a more extensive and timely fashion, by creating brochures and PR videos, as well as providing assistance in editing the PR magazine “MAMOR” and cooperation on media coverage.

Furthermore, as MOD/SDF’s activities reach out worldwide, it is important to accurately publicize those activities to the international community and secure the understanding and trust of the respective countries. As efforts for this purpose, the MOD/SDF is further upgrading the MOD English website and actively distributing timely, easy-to-understand information through Tweets in English, as well as engaging in PR activities towards the international community by

various means such as providing coverage opportunities for the overseas media, producing an English version of the Defense White Paper, and issuing the English PR pamphlet “Japan Defense Focus” (JDF).

2 Events and PR Facilities

The MOD/SDF conducts activities to widely inform nationals of the current circumstances of the SDF. These activities include the GSDF Fuji Fire Power Exercise, cruises to experience MSDF vessels, and demonstration flights and boarding experiences on ASDF aircraft such as the Blue Impulse. In addition, at camps and bases throughout the country, events including equipment exhibitions and unit tours are held on occasions such as the anniversary of the unit’s foundation. In some instances, they also hold parades throughout the cities, with cooperation from the local communities. Furthermore, as part of the commemoration of the SDF anniversary, the SDF Marching Festival is held every year.¹

In addition, the GSDF, MSDF, and ASDF conduct a troop review, a fleet review, and an air review respectively every year. In 2020, in view of the COVID-19 situation with concerns over the impact on the mission performance of the MOD/SDF, the existing operation procedures for troop reviews, etc., were revised and the air review was held on a smaller scale without spectators at the ASDF Iruma Airbase.

The MOD/SDF also actively opens PR facilities to



Three Self-Defense Forces Joint Concert for Children and Youths

¹ In FY2020, various events were canceled or conducted in altered forms due to the COVID-19 situation. Notably, the JSDF Music Festival was canceled and, instead, the “Three Self-Defense Forces Joint Concert for Children and Youths” was held at the Showa Women’s University Hitomi Memorial Hall and at the Bunkamura Orchard Hall.

On November 28, 2020, the MOD/SDF held the JASDF Air Review 2020 at Iruma Airbase, with Prime Minister SUGA Yoshihide performing the inspection.

In the past, thousands of support personnel had gathered at Hyakuri Air Base to make the necessary preparations for the ceremony. A large number of guests were invited, and the Prime Minister provided instructions as the inspector. These events were conducted on a large scale, with flyovers by various aircraft of the Ground, Maritime, and Air Self-Defense Forces, and demonstration flights by Blue Impulse and the U.S. Forces.



However, with recent changes to the circumstances surrounding the MOD/SDF, large-scale air review ceremonies such as those held in the past have become a significant burden for troops and other personnel and may hinder them from fulfilling their duties.

In light of this situation, as well as due to COVID-19, in 2020, the air review ceremony was held in a new form without inviting guests, focusing on inspection and instructions by the inspector. Social networking services were used to distribute live footage of the ceremony for the public.



Guided tour of the Imperial General Headquarters underground bunker

the public. For instance, the number of visitors on the facility tour at the PR facilities in the MOD at Ichigaya district (Ichigayadai Tour) reached 465,700 as of the end of March 2021. The underground bunker of the Imperial General Headquarters in the same area was opened to the public in August 2020. Each SDF service also has PR facilities and archives, and other facilities open to the public.

3 Enlistment Experience Programs

The MOD/SDF offers SDF Life Experience Tours for undergraduate and graduate students as well as women² and Enlistment Experience Programs for groups, companies and other organizations.³ These programs are intended to promote participants' understanding of the SDF by offering opportunities to experience the daily life and training of the SDF, as well as to have direct contact with SDF personnel.

² Public invitations to SDF Life Experience Tours can be accessed from the MOD/SDF website.

³ Tours to experience the everyday life in the GMSDF, MSDF, and ASDF. They are implemented upon request from private companies and other organizations through the Provincial Cooperation Offices.

Retirement of the F-4 Fighter: The Second Life of the Phantom II

The Air Self-Defense Force's F-4 fighter (Phantom II), which was introduced in 1972 and continued to protect Japan's skies from the front line for about 50 years, has been completely replaced by the F-35 fighter by the end of FY2020, much to the dismay of many SDF personnel. The Phantom II had been flown by many pilots and has become familiar to the public on occasions of air festivals, bringing about many fans outside the Air Self-Defense Force, and books, photo collections and DVDs featuring the beloved aircraft. Now, what will happen next to these Phantom IIs? Here we will introduce how they will spend their retirement years.

The Phantom II, alongside other important equipment operated by the Air Self-Defense Force will be displayed at Air Self-Defense Force bases, the Hamamatsu Public Affairs Center (Airpark), local governments, museums, etc., as requested in accordance with the Ministerial Ordinance on the Free Loan and Transfer of Goods under the Jurisdiction of the Ministry of Defense. This will be the start of the aircraft's second life.

The Phantom II has already been on display at the Air Self-Defense Force's Chitose, Misawa, Hyakuri, Gifu, Nyutabaru, and Naha Air Bases, and will be newly displayed at Komatsu, Miho, and Tsuiki Air Bases and Air Park in 2020. As well as acting as a morale booster for SDF personnel, it will also be enjoyed by visitors to air festivals.

Outside of the Air Self-Defense Force, the aircraft will be on display at the Aomori Prefectural Misawa Aviation & Science Museum (Misawa City, Aomori Prefecture) and Ibaraki Airport Park (Omitama City, Ibaraki Prefecture). Ibaraki Airport Park, located in Omitama Ibaraki Prefecture, has had a Phantom II on display since 2011. Feedback has been excellent, with visitors and workers commenting "we are very happy to see such a powerful aircraft up close" and "the presence of the aircraft alone makes events more colorful."

There is also the possibility that they will be exhibited at other locales or museums in the future. We hope you will look forward to it.



4 Efforts and Cooperation of the Units with Their Local Communities

The MSDF carries on an Imperial Navy tradition as their signature dish: the SDF Curry. The delicious curry, whose recipe is a secret, is served at lunch every Friday on MSDF vessels to the personnel on board. The recipe is shared with restaurants and diners in the vicinity of the MSDF bases, and the curry is promoted as a local signature dish by the community as a whole.

The "secret" recipe is also accessible on the MSDF website.

Since 2018, the ASDF has been publicizing a Japanese-style fried-chicken dish called "Ku-ji Kara-age" as its signature menu, together with its mascot, "Karatto-Taicho." The name, "Ku-ji Kara-age" literally means "ASDF fried chicken," and comes with the wish to aim higher, and in addition to being very nutritious and rich in protein, it is very affordable and easy to cook.

The recipe of each base in Japan is available to the public on the ASDF website. A series of short videos on



MSDF Curry (Supply Ship JS "Omi" Beef Curry)

how the Kara-age is prepared and cooked is distributed on the official ASDF Twitter account and elsewhere under the title "Ozora Kitchen (Blue Sky Kitchen)."

In November 2020, the MSDF and ASDF had a showdown with their MSDF Curry and ASDF Sky-

Joint Initiative by the MSDF and ASDF Public Relations Offices

The “Maritime Self-Defense Force Curry vs. Air Self-Defense Force Karaage” initiative was launched to promote these two cuisines as part of the public relations efforts of the Maritime Self-Defense Force (MSDF) and Air Self-Defense Force (ASDF). It began with the hope that more people will know about MSDF Curry and ASDF Karaage by cooking the recipe at home and eating them, while also learning more about the Maritime and Air Self-Defense Forces. Heads of the MSDF and ASDF played a role in creating the poster, which was distributed through official social media channels.

Initiative by the MSDF Public Relations Office

(1) The traditional flavor of MSDF Curry

Curry is a dish with a long history in Japan. It began being eaten by the Imperial Navy in the Meiji era, and the MSDF still serves curry every Friday for each of its units. Each MSDF unit has its own unique recipe for curry. The seasoning and arrangement are decided by the cooks who prepare the curry in each unit. Typical recipes from each unit are introduced in the “Ship’s Meals” section of the MSDF’s official website. They are also introduced on the Force’s official social media sites, so please take a look.

Initiative by the ASDF Public Relations Office

(2) The new flavor of ASDF Karaage Chicken

The ASDF calls this dish “Ku-ji Karaage,” meaning “The ASDF is aiming higher.” Each base has its own unique recipe that

uses regional specialties and local ingredients.

Typical recipes from each unit are posted on the ASDF’s official website. Videos that introduce the cooking method, can also be seen on the Ozora Kitchen section of the Force’s official social media, so please take a look.

The last Friday of each month is designated as “Ku-ji Karaage” day, and on this day, kara-age (fried chicken) is served for lunch at each base. This is not to compete with the MSDF, but instead because Friday is “Fry Day.”



“Karatto-Taicho,” the “Karaage Promotion Unit”

High Fries, which resulted in the collaboration menu “Maritime-Air Kukai.”

Meanwhile, the GSDF is promoting the wide variety of local meals served at garrisons stationed all over Japan as “GSDF Meals” to widely share the recognition among the people of Japan that the GSDF is an organization that values the regions (“grow local, eat local”) and people (the troops).

The concept of GSDF Meals are as follows; (1) supporting the body building of warriors, (2) cooking local signature dishes using local specialties, and (3) offering variations in response to requests from the troops.

To gain national recognition for the GSDF Meals, social network platforms are being used to publicize the local signatures at garrisons stationed all over Japan. Also, popular recipes among the troops are available as special features on the GSDF website.

The GSDF held a “GSDF Meal Grand Prix” for “local specialties, ramen, meat dishes, and entree-on-rice (*donburi*),” with the viewers’ vote determining the winner. The “One of the New Three Nightscapes of Japan” Moiwayama Ramen from the Camp Makomanai of the Northern Army became the proud winner.



One of the New Three Nightscapes of Japan (©YAKEI Convention & Visitors Bureau)
Moiwayama Ramen (Camp Makomanai)

2 Initiatives for Public Document Management and Information Disclosure

1 Necessity of Proper Management of Public Records and Archives and Proper Operation of the Information Disclosure System

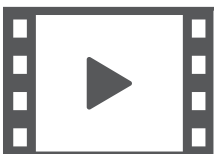
Democracy, which is the most important system of the country, is founded on the principle that the public has access to accurate information, thereby making appropriate judgment and exercise of sovereignty. Administrative documents held by the government are of the utmost importance for the public’s access to accurate information. For this reason it is an important responsibility for the government, including the MOD/SDF, to manage information in an appropriate manner and appropriately respond to the public’s information disclosure requests.

2 Promotion of Proper Management of Public Records and Archives, and Proper Operation of the Information Disclosure System

The MOD/SDF takes it seriously that the issues over daily reports in South Sudan and Iraq brought about the public’s distrust in the MOD/SDF.

The MOD/SDF is making full efforts to prevent recurrence based on the “Measures for Ensuring Appropriate Management of Public Records” (Adopted by the Ministerial Council on the Management of Administrative Documents and Related Matters on July 20, 2018), which compiles measures necessary for proper management of public records and archives by the entire government. The MOD/SDF is also working for proper management and response to requests for information disclosure by reforming the awareness of personnel and the organization culture, enhancing the checking framework, for example.

 See Reference 65 (Record of Information Disclosure by the Ministry of Defense [FY2020])



Video: ASDF Karaage Chicken: Bonus Content Compilation
URL: <https://www.youtube.com/watch?v=MIsPQyNKXOU>



Video: Kan (Ship) Tube
URL: <https://www.youtube.com/watch?v=sTg3a3hUXWQ>



3 Initiatives for Policy Evaluation

1 Engagement in Policy Evaluation

The MOD has been conducting the evaluation of various policies based on its policy evaluation system. In FY2020, the MOD conducted policy evaluations of research and development (R&D) programs and projects concerning Special Taxation Measures as well as the major policies and programs of the NDPG and the MTDP.

2 Promotion of Evidence-Based Policy Making (EBPM)

The MOD is promoting EBPM by establishing a structure for promotion of EBPM within the ministry, including the establishment of a new position, “Director-General for Evidence-based Policymaking” in FY2018.

3 Initiatives for the Personal Data Protection System

In light of respecting individual rights in line with the Act on the Protection of Personal Information Held by Administrative Organs, the MOD takes measures to ensure the security of the personal information under its control, and discloses such information upon request.

4 Appropriate Operation of the Whistleblower Protection System

The MOD sets up a system to handle whistleblowing made by its officials, employees and outside workers, establishing internal and external contact desks to deal with whistleblowing and to protect whistleblowers.

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https://www.mod.go.jp/en/publ/w_paper/wp2021/pdf/R03shiryo.pdf



■ Defense Chronology

https://www.mod.go.jp/en/publ/w_paper/wp2021/pdf/R03nenpyo.pdf



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